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ROYAL GARDENS, KEW.

BULLETIN

OF

MISCELLANEOUS INFORMATION.

APPENDIX II.—1890.

NEW GARDEN PLANTS.

The number of garden plants annually described in botanical and horticultural publications, both English and foreign, is now so considerable that it has been thought advisable to publish a complete list of them in the *Kew Bulletin* each year (*see* April numbers for 1888 and 1889). The following list comprises all the new introductions recorded during 1889. These lists are indispensable to the maintenance of a correct nomenclature, especially in the smaller botanical establishments in correspondence with Kew, which are, as a rule, only scantily provided with horticultural periodicals. Such a list will also afford information respecting new plants under cultivation at this establishment, many of which will be distributed from it in the regular course of exchange with other botanic gardens.

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1890.

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The present list includes not only plants brought into cultivation for the first time during 1889, but the most noteworthy of those which had been re-introduced after being lost from cultivation. Other plants included in the lists have been in gardens for several years, but either were not described or their names had not been authenticated until recently.

In addition to species and botanical varieties all hybrids, whether introduced or of garden origin, but described for the first time in 1889, are included. Mere garden varieties of such plants as Coleus, Codiæum, or Narcissus are omitted for obvious reasons.

Reference is given only to the place where the plant is first described, or figured, or where additional information is published.

Besides the natural order and country, a brief notice of the habit and most striking points of each plant is given, but it is not considered necessary to attempt botanical descriptions.

In every case the plant is cited under its published name, although some of the names are doubtfully correct. Where, however, a correction has appeared desirable this is added.

The name of the person in whose collection the plant was first noticed or described is given where known.

An asterisk is prefixed to all those plants of which examples are in cultivation at Kew.

The publications from which this list is compiled, with the abbreviations used to indicate them, are as follows:—*B. M.*—Botanical Magazine. *B. T. O.*—Bulletino della R. Società Toscana di Orticultura. *Bull Cat.*—Bull, Catalogue of New, Beautiful, and Rare Plants. *Dammann Cat.*—Dammann & Co., Catalogue of Bulbs, Roots, and Plants. *Gard.*—The Garden. *G. C.*—Gardeners' Chronicle. *G. and F.*—Garden and Forest. *Gfl.*—Gartenflora. *H. G.*—Hamburger Garten- und Blumenzeitung. *Ill. H.*—L'Illustration Horticole. *Jard.*—Le Jardin. *J. of H.*—Journal of Horticulture. *L.*—Lindenia. *Nat. Arb. Zösch.*—Neuheiten-Offerte des National-Arboretums zu Zöschen. *O.*—L'Orchidophile. *R.*—Reichenbachia. *Rgl. Descr.*—Regel, Descriptiones et emendationes Plantarum in horto imperiali botanico Petropolitano cultarum, 1889. *R. H.*—Revue Horticole. *R. H. B.*—Revue de l'Horticulture Belge. *Veitch Cat.*—Veitch & Sons' Catalogue of Plants. *Veitch Man. Cypr., and Masdev.*—Veitch & Sons' Manual of Orchidaceous Plants, Cypripedium, and Masdevallia. *W. G.*—Wiener Illustrierte Garten-Zeitung. *Williams Cat.*—Williams' New and General Plant Catalogue. *W. O. A.*—Warner and Williams' Orchid Album.

The abbreviations used in the descriptions of the plants are:—*Diam.*—Diameter. *Fl.*—Flower. *Fr.*—Fruit. *ft.*—Foot or Feet. *G.*—Greenhouse. *H.*—Hardy. *H. H.*—Half-hardy. *in.*—Inches. *Infl.*—Inflorescence. *L.*—Leaves. *lin.*—Line (one-twelfth of an inch). *Per.*—Perennial. *Pet.*—Petals. *S.*—Stove. *Sep.*—Sepals. *Shr.*—Shrub.

Acer dasycarpum, var. **pulverulentum,** Hort. (*R. H. B.* 1889, 268.) Sapindaceæ. H. tree. A form of the Silver Maple, in which the l. are spotted with white, and the tips of the young shoots tinted with red.

Acer Negundo foliis marginatis aureis, Hort. (*R. H. B.* 1889, p. 268.) H. tree. A form with l. bordered with golden yellow, as constant as the silver variegated variety, but of more vigorous growth. (Raised by Guichard, Orleans.)

Acer Negundo, var. **Guichardi,** Hort. (*R. H. B.* 1889, p. 268.) H. tree. A form with the l. all yellow, like those of the Golden Elder; growth fairly vigorous. Raised by the nurseryman whose name it bears.

***Aciphylla Lyallii,** Hook. f. (*W. G.* 1889, p. 123.) Umbelliferæ. H. per. This is mentioned as being introduced into cultivation by T. Smith of Newry. New Zealand.

Acineta Wrightii, Fraser. (Gard. World, 1889, v. 5, p. 673; *L.*, v. 4, p. 88.) Orchideæ. A fine robust species, with ovate bulbs marked on their faces with two grooves, and bearing 2–4 coriaceous, lanceolate, acute l. Fl.-stem 2–3 ft. long, with numerous handsome fl. Sep. and the smaller pet. yellowish, dotted with purple. Lip. 3-lobed, the lateral lobes whitish, the terminal lobe purple, with a white border, pubescent in the middle, crest oblong, brown-purple, pubescent with purple hairs. This is *Lacæna spectabilis,* Rchb. f. Mexico. (E. H. Watts, Chiswick.)

Adiantum tetraphyllum, H. B. var. **obtusum,** Kuhn. (*Ill. H.* 1889, p. 65, pl. 86.) Filices. S. Fern, with graceful bipinnate fronds, 8–10 in. high. Stipes brown, pinnæ 4–6, pinnules trapezoid obtuse. Congo. (L'Horticulture Internat.)

Adiantum Paradiseæ, Baker. (*G. C.* 1889, v. 6, p. 558.) G. A well marked species, with the habit of *A. æthiopicum.* Fronds 6 in. broad and long, pinnæ petioled; ultimate segments crenate at the apex. S. Africa. (J. G. Wood, Grahamstown.)

Æchmea purpurea, Williams. (*Williams Cat.* 1889, p. 22.) Bromeliaceæ. A distinct looking plant, with arching l., 12–18 in. long, pale green at the tips, purplish-green towards the base, and assuming in the summer time a crimson-purple hue. Columbia.

Æsculus chinensis, Bunge. (*W. G.* 1889, p. 452.) Sapindaceæ. H. tree. A horse-chestnut with the divisions of the l. distinctly stalked, oblong-oblanceolate, finely serrate; and a panicle of rather small fl. China.

Aganisia cyanea, Rolfe (not of Rchb. f.). (*G. C.* 1889, v. 6, p. 492.) Orchideæ. Syn. *Warrea cyanea,* Ldl. *Bot. Reg.* 1845, t. 28.

Agave Maximowicziana, Regel. (*Gfl.* 1889, p. 483.) Amaryllidaceæ. G. L. 1½ ft. long, 3½ in. broad, oblanceolate, green, densely repand-denticulate on the margins. Fl.-stem 6½ ft. high. Fl. sessile, geminate, green, in a dense spike. (St. Petersburg Bot. Gard.)

Albuca trichophylla, Baker. (*G. C.* 1889, v. 6, p. 94.) Liliaceæ. G. A small species allied to *A. juncifolia,* Baker. It has small bright yellow fl., and slender pubescent subterete l. Natal. (Cambridge Bot. Gard.)

***Allamanda violacea,** Gardn. (*G. C.* 1889, v. 6, p. 304.) Apocynaceæ. S. A handsome climber, distinct from all other species in having rose-purple fl. It was in cultivation in 1861, but soon afterwards lost. Brazil. (Kew.)

Allium Alexianum, Rgl. (*Rgl. Descr.,* p. 5.) Liliaceæ. H. Bulb globose; stem hollow; l. 2–3 or more, elliptic-oblong, or oblong-lanceolate 1–2 in. broad, glabrous; umbel many flowered, fl. whitish, striped with brownish-purple. Turkestan. (St. Petersburg Bot. Gard.)

Allium ammophilum, Heuff. (*Rgl. Descr.,* p. 5.) H. bulb, in the way of *A. senescens,* but with whitish-yellow fl. marked with reddish nerves, sweet-scented. Banat, Austria. (St. Petersburg Bot. Gard.)

***Allium cyaneum,** Rgl. (*Rgl. Descr.,* p. 6.) H. bulb similar to *A. kansuense,* but the leaves are all filiform-terete, not channelled; and the stamens are twice as long as the blue fl. Kansu, North China. Syn. *A. cyaneum,* var. *macrostemon,* Rgl. (St. Petersburg Bot. Gard.)

Allium hierosolymæ, Rgl. (*Dammann Cat.* 1889, p. 3.) H.H. Dwarf, about 8 in. high, with small round bulbs, curved hairy l., and umbels of white fl. Palestine.

Allium kansuense, Rgl. (*Rgl. Descr.,* p. 6.) H. Bulbs slender, cylindric, tufted; stem leafy to near the middle. L. linear channelled in the lower part, margins rough. Umbel many flowered, hemispherical; fl. blue, with the stamens shorter than the perianth segments. Kansu, North China. Syn. *A. cyaneum,* var. *brachystemon,* Rgl. (St. Petersburg Bot. Gard.)

Allium orientale, Boiss. var. **rubellum,** Rgl. (*Dammann Cat.* 1889, p. 3.) H. A pretty variety, with large, round, white-skinned bulbs, small glaucous l., and umbels of bright rosy fl.

Allium Przewalskianum, Rgl. (*Rgl. Descr.,* p. 5.) H. bulb with terete rush-like l., and an umbel of rosy-lilac fl. Kansu, China. (St. Petersburg Bot. Gard.)

Allium Sprengeri, Rgl. (*Rgl. Descr.*, p. 7; *Dammann Cat.* 1889, p. 3.) H. bulb, allied to *A. flavescens*, with ovoid bulbs crowded on a short rhizome, flat linear l., and a many-flowered umbel of yellowish fl. Jaffa, Syria. (Dammann & Co.)

***Aloe Monteiroi,** Baker. (*G. C.* 1889, v. 6, p. 523.) Liliaceæ. S. A distinct species near *A. obscura*, Mill., but with longer, more channelled leaves, and duller coloured flowers. Delagoa Bay. (Kew.)

Amaryllis Leeana, Williams. (*Williams Cat.* 1889, p. 22.) S. bulb. Garden variety.

***Amorphophallus Eichleri,** Hook. f. (*Bot. Mag.* t. 7091.) Aroideæ. A tuberous aroid with a solitary leaf 18 in. high, the blade much divided, green. Spathe cup-shaped, 2 in. across, purple and white; spadix 6 in. high, erect, club-shaped, brown. Stove. W. Trop. Africa. (Kew.)

Ampelovitis Davidi, Carr. (*R. H.* 1889, p 204, with pl.) Ampelideæ. H. Vine, with the l. either simple, lobed, or digitate, shining green above, glaucous below. Fr. black, in loose bunches. North China.

***Angræcum germinyanum,** Hook. f. (*Bot. Mag.*, t. 7061.) Orchideæ. A loose-growing species with leafy stems, the leaves 2 in. long, the flowers solitary on axillary peduncles, pure white, with long subulate petals and sepals, a broad, tailed labellum, and a spur nearly 6 in. long. Stove. Madagascar. (Kew.)

Angræcum kimballianum, Hort. *See* **A. polystachys,** P. Th.

***Angræcum polystachys,** P. Th. (*G. C.* 1889, v. 5, p. 552.) A small plant, with ligulate, bilobed l., and racemes of small, whitish-green fl. Syn. *A. kimballianum*, Hort. (Hanover Bot. Gard.)

Anhalonium prismaticum, Lem. (*Gard.* 1889, v. 26, p. 238.) Cactaceæ. G. succulent. A synonym of *Mammillaria aloides*, Monv. (Kew.)

Anredera scandens, Moq. (*Dammann Cat.* 1889, p 4.) Chenopodiaceæ. G. per. climber, with fleshy, light green l. and long cylindrical racemes of white fl. Texas.

Anthurium Allendorfii, Grusoni, Kolbii, Ortgiesii, and **Wittmackii,** Rössing. (*Gfl.* 1889, p. 121, t. 1293.) Aroideæ. S. A series of garden hybrids derived from *A. andreanum*, and *A. Lindigii*. (Gruson.)

Anthurium andreanum, vars. **atropurpureum,** and **Louisæ-Pynaert.** (*R. H. B.* 1889, p. 169, with pl.) S. Two pretty hybrids between *A. andreanum* and *A. Chantrieri*. (Makoy.)

Anthurium burfordiense, Hort. (*G. C.* 1889, v. 6, p. 700.) A garden hybrid very similar to *A. leodiense*, *A. carneum*, &c. The spathe is large and coloured brilliant scarlet. (Sir Trevor Lawrence.)

Anthurium chantinianum, Martinet. (*R. H.* 1889, p. 157; *H. G.* 1889, p. 262.) A garden hybrid between *A. houletianum* and *A. andreanum*. (Chantrier Brothers.)

Anthurium cymbiforme, N. E. Br. (*G.C.* 1889, v. 6, p. 67.) S. per. Allied to *A. ornatum*, Sch., which it resembles in its cordate leaves and large white ornamental spathes, with salmon-pink spadices. Colombia? (Bull.)

Anthurium hardyanum, Martinet. (*R. H.* 1889, p. 157; *H. G.* 1889, p. 262.) Garden hybrid between *A. andreanum* and *A. Eduardi*. (Chantrier Brothers.)

Anthurium scherzerianum, vars. **atrosanguineum, nigricans, rotundiflorum** and **sanguineum,** Hort. (*W. G.* 1889, p. 113.) S. Garden varieties.

Anubias heterophylla, Engler. (*G. C.* 1889, v. 6, p. 67.) Aroideæ. S. per. Leaves about 1 ft. long by 3 in. broad, bright green, blotched with dull yellow; flowers small, not showy. Congo. (Bull.)

Aquilegia cœruleochrysantha. (*W. G.* 1889, p. 292.) Ranunculaceæ. Garden hybrid.

Aquilegia flabellata, S. and Z. var. *R.H.B.* 1889, p. 157, with pl.) Ranunculaceæ. H. per. A pretty variety, with white fl. (Vilmorin-Andrieux & Co.)

***Arisæma Wrayi,** Hemsl. (*G. C.* 1889, v. 5, p. 136.) Aroideæ. A well marked species, with leaves 9–18 in. high, the petioles green, mottled with reddish-brown; peduncles erect, 1–2 ft. long, each bearing a green and white spathe something like *A. nepenthoides* in size and shape. Stove. Perak. (Kew.)

Arum detruncatum, Damm. (*Dammann Cat.* 1889, p. 4 and p. 5, f. 2; *W. G.* 1889, p. 401, f. 64; and *H. G.* 1889, p. 509.) Aroideæ. H. H. per., with large flat tubers, cordate-triangular l., and large, shortly-stalked spathes, of a greenish-yellow, spotted with purple. Asia Minor.

Arum sanctum, Damm. (*Dammann Cat.* 1889, p. 3 and p. 5, f. 1; *Gfl.* 1889, p. 655; *H. G.* 1889, p. 509; *W. G.* 1889, p. 401, f. 65.) H. H. per., with large flat tubers, large cordate-triangular l., and large, long-stalked spathes of a velvetty blackish-purple, with black spadix. Palestine.

Arundinella anomala, Steud. (*Gfl.* 1889, p. 167.) Gramineæ. H. grass of very dwarf habit, suitable for lawns, &c., and requiring cutting only twice a year. Japan. (Berger & Co.)

Asplenium scandens, J. Sm. (*G. C.* 1889, v. 5, p. 662.) Filices. A handsome stove fern with a stout creeping rhizome, and large multi-pinnatifid elegant fronds. New Guinea, &c. (Veitch & Sons.)

***Aster Herveyi,** Gray. (*G. and F.* 1889, p. 472, f. 131.) Compositæ. H. per. A slender plant 1–2 ft. high; slightly scabrous; l. obscurely serrate, ovate on naked petioles, upper ones lanceolate, fl. in loose corymbose heads, bright lilac or violet; rays narrow, ½ in. long. Rhode Island, N. America.

***Aster lindleyanus,** Torr. & Gray. (*G. and F.* 1889, p. 448, fig. 127.) H. per. A showy species, stems 1–2 ft. high, lower l. ovate, obscurely cordate, petioles winged; upper l. sessile, acuminate at both ends, serrate; fl. in loose panicles, pale violet; rays ½ in. long. N. America.

Azalea dianthiflora, Carr. (*R. H.* 1889, p. 391; *W. G.* 1889, p. 442.) Ericaceæ. H. A vigorous free-flowering shr. with rather large elliptic-oblong, softly hairy l. Calyx lobes long, pubescent. Corolla 3 in. in diam., rose or violet, dotted with dark brown. Pedicels tomentose. Japan. (Weisener.)

***Bakeria tillandsioides,** André. (*R. H.* 1889, p. 84, with pl.; *W. G.* 1889, p. 144.) Bromeliaceæ. S. A handsome Bromeliad, similar to *Tillandsia argentea* in appearance, with attenuate silvery l. and a lax panicle 16–20 in. high, of pretty rosy-purple fl. about ½ of an inch in diam. Brazil. (A. de la Devansaye.)

Ballota suaveolens, L. (*W. G.* 1889, p. 81; and *H. G.* 1889, p. 187.) Labiatæ. S. or H. H. annual of erect branching habit, with oval serrate l. and pretty blue fl. The whole plant is strongly scented. West Indies.

Begonia coccinea, Valler. (*R. H.* 1889, p. 131.) Begoniaceæ. G. Garden hybrid. (E. Vallerand.)

Begonia Lemahoutii, Valler. (*Jard.* 1889, p. 258.) G. per. of compact habit, with oblique, acuminate dark green l., washed with purple beneath, wavy, toothed, and ciliate on the margin. Peduncles rising above the l., bearing cymes of white fl., tinted with rosy outside. Origin unknown.

Begonia octopetala, var. **Lemoinei,** Carr. (*R. H.* 1889, p. 32, f. 7.) Garden hybrid. (Lemoine.)

Begonia patula, Kl. (*Rgl. Descr.*, p. 13.) S. per. A suffruticose species, growing to 3 ft. in height, with obliquely cordate l. angulate or doubly toothed on the margin, dark green and sparsely hairy above, reddish beneath; and with many-flowered cymes of pink fl. Brazil. (St. Petersburg Bot. Gard.)

Bifrenaria Harrisoniæ, Rchb. var. **alba,** Kranzl. (*Gfl.* 1889, p. 651, t. 1312, f. 2.) Orchideæ. A variety with the sep. white tipped with reddish, the pet. ivory-white, and the lip yellow veined with purple on the side lobes, and the front lobe white veined with rose-red.

Billbergia blireiana, André. (*R. H.* 1889, p. 139.) Bromeliaceæ. S. Garden hybrid between *B. nutans* and *B. iridifolia.* (André.)

Billbergia vexillaria, André. (*R. H.* 1889, p. 467, f. 118 and pl.) Garden hybrid between *B. thyrsoidea,* var. *splendida* and *B. Moreli.* (André.)

Billbergia Windii, Makoy. (*Gfl.* 1889, p. 7, f. 3–5.) A garden hybrid between *B. nutans* and *B. decora.* (Makoy & Co.)

***Brodiæa Palmeri,** S. Wats. (*G. and F.* 1889, p. 244, 107.) Liliaceæ. A beautiful hardy bulb, 1–2 ft. high, l. numerous, lanceolate-linear, very thin; fl. umbellate, 1 in. long, bright purple. It produces small bulbils in large quantity on the surface of the ground. Lower California.

Bulbophyllum fallax, Rolfe. (*G. C.* 1889, v. 6, p. 558.) Orchideæ. An elegant little species, with a scape 8 in. long, bent acutely in the middle, and bearing small dark purple flowers. Assam (Seeger & Tropp).

***Bulbophyllum suavissimum,** Rolfe. (*G. C.* 1889, v. 5, p. 297.) A diminutive species, with arching racemes of small pale yellow flowers. Upper Burmah. (C. Bill, Cheadle.)

*Cabomba aquatica, Aubl. (*Bot.Mag.*, t. 7090.) Nymphæaceæ. A small plant, with dimorphic leaves, the submerged ones being much divided, and the floating entire, circular and peltate. The flowers are small, yellow. Stove. Trop. America. (Kew.)

*Calanthe biloba, Lindl. (*W. O. A.*, vol. 8, pl. 378.) Orchideæ. An evergreen species, with elongated stems, bearing several large lanceolate acute l., and a long-stalked raceme of many fl. Sep. and pet. oblong-lanceolate acuminate, purplish, tinged with yellow-brown; lip bilobed, purple streaked with white. Sikkim. (Kew.)

Calanthe darblayana, God. Leb. (*O.* 1889, p. 178, with pl.; *Gard.* 1889, v. 35, p. 228.) A garden hybrid between *C. Regnieri* and *C. vestita*, var. *grandiflora* (var. *gigantea*). (Madame Darblay, St. Germain-les-Corbeil.)

Calceolaria suffruticosa, Carr. (*R. H.* 1889, p. 93.) Scrophularineæ. Garden variety.

Calochortus obispoensis, Lemmon. (*G. and F.* 1889, p. 160, f. 101.) Liliaceæ. A very peculiar and striking species. Stems sparingly branched, 1–2 ft. high. L. narrow, acute, convolute, sepals orange and purple on a greenish-yellow ground, petals shorter, terminating abruptly, and usually cleft at summit, ground colour lemon yellow, orange towards base, tips reddish-brown, and covered with long delicate hairs of darker tint. Anthers of different shades of orange; filaments purplish. San Luis Obispo, California.

Camassia Engelmannii, Sprenger. (*B. T. O.* 1889, p. 101.) Liliaceæ. H. Bulb very much larger than in the other forms of the genus. L. 8–12 in. long, about 1½ in. broad, glaucous above. Fl. bright blue in a lax raceme, the perianth segments not so distinctly nerved as in the other species. Rocky Mountains. (Dammann & Co.)

Canna indica, var. Bertini, Carr. (*R. H.* 1889, p. 95.) Scitamineæ. Garden variety. (Bertin, Versailles.)

Carludovica elegans, Williams. (*Williams Cat.* 1889, p. 23 and p. 21, with fig.) Cyclanthaceæ. S. An ornamental Palm-like plant with fan-like l., 3 ft. across, divided in four or five segments, which are again deeply divided into narrow segments.

Carludovica palmifolia, Hort. (*G. C.* 1889, v. 6, p. 250.) A provisional name for a plant introduced by B. S. Williams & Son, Upper Holloway. Stove.

*Carludovica rotundifolia, Wendl. (*Bot. Mag.*, t. 7083.) Cyclanthaceæ. A species much in the way of *C. palmata*, but larger, and with a flower scape as large again. Stove. Costa Rica. (Kew.)

Carpinus japonica, Bl. (*Gfl.* 1889, p. 581.) Cupuliferæ. H. A dwarf tree with lanceolate-ovate, long-pointed l., doubly serrate on the margin. Male catkins cylindric, with spreading ovate bracts. Female catkins large, ellipsoidal, with large, toothed imbricate bracts. (Forest Acad., Münden.) Japan.

Castanea vesca, var. japonica. (*H. G.* 1889, p. 238. *Gfl.* 1889, p. 167.) Cupuliferæ. H. tree. A variety of the Chestnut, having a white pubescence on the underside of the young l. Syn. *C. japonica*, Bl. Japan. (Ingegnoli Brothers, Milan.)

Casuarina sumatrana, Jungh. (*R. H.* 1889, p. 467.) Casuarineæ. S. shr. 4–5 ft. high, excessively branched, branches leafless, very slender, triquetrous. A useful plant for bouquets, &c. on account of its very slender plumose branchlets. Sumatra.

*Catasetum darwinianum, Rolfe. (*G. C.* 1889, v. 5, p. 394.) Orchideæ. Flowered at Kew in 1888, when it was named *C. fuliginosum*, Lindl. by mistake. It produced two racemes, one of male flowers, the other female, both from the same pseudobulb. Brit. Guiana.

*Catasetum fimbriatum, Ldl. var. platypterum, Rchb. f. (*G. C.* 1889, v. 5, p. 168.) A large flowered variety; colour of segments greenish-white with purple-brown streaks and dots; lip garlic green. (Sander & Co.)

Catasetum galeritum, var. pachyglossum, Rchb. f. (*G. C.* 1889, v. 5, p. 73.) Distinguished from the type by its almost square, thick, obtuse angled labellum. Stove. (Sir Trevor Lawrence.)

*Cattleya dowiana, Batem. var. chrysotoxa, Sander. (*R.* vol. 2, p. 71, t. 80.) Orchideæ. A handsome form, with bright yellow sep. and pet., and the lip having a large golden blotch on each side the disk, veined with dark crimson-purple. Columbia. (J. Connell, Tooting Common.)

Cattleya Eldorado, var. virginalis, Warn. and Will. (*W. O. A.*, vol. 8, pl. 388.) This is the same as *C. virginalis* and *C. Wallisii*. Brazil.

Cattleya massaiana, Warn. and Will. (*W. O. A.*, vol. 8, pl. 362.) A fine handsome form, with large fl. like those of *C. Dowiana;* having rosy-mauve sep. and pet., and a rich magenta-crimson lip, with a large yellow blotch on each side the throat, which is veined with yellow. Antioquia.

Cattleya Mossiæ, Hook. var. **bousiesiana,** Linden. (*L.*, v. 4, p. 85, pl. 185.) A handsome form, with the fl. marbled with rosy-purple. (L'Horticulture Internat.)

Cattleya Mossiæ, Hook. var. **warocqueana,** Linden. (*L.*, v. 4, p. 99, pl. 192.) A handsome form, with large fl., white, delicately tinted with rosy, the lip with a rich orange-coloured throat, streaked with magenta-carmine in front. (L'Horticulture Internat.)

Cattleya Nilsoni, Sander. (*Gfl.* 1889, p. 481.) Bulbs and l. similar to those of *C. guttata* and *C. velutina.* Fl. like that of *Lælia elegans.* Brazil. (Sander & Co.)

Cavendishia spectabilis, Bull. (*Bull Cat.* 1889, p. 7.) Vacciniaceæ. G. A handsome subscandent shrub, with oblong acuminate l., of a bright reddish-bronze on the young growths, changing to bright green. Fl. in short, compressed racemes, tubular, slightly swollen below, white, shaded with pink, and when in bud covered with rosy-carmine bracts. Columbia.

Ceanothus americana variegata, Hort. (*R. H. B.* 1889, p. 269.) Rhamnaceæ. H. sh. Garden variety, having the l. bordered with yellow.

Ceanothus prostratus, Benth. (*Gfl.* 1889, p. 139.) H. shr. of dwarf habit, with small, opposite, elliptic or obovate l., entire or toothed; fl. blue axillary. Oregon. (Forest Acad., Münden.)

Cephalanthus occidentalis, L. var. **angustifolius,** André. (*R. H.* 1889, p. 281, f. 71.) Rubiaceæ. H. shr. A form with the l. narrower than in the type, and lanceolate. (Lavallée.)

Cerasus serotina, var. **cartilaginea,** Hort. (*R. H. B.* 1889, p. 269.) Rosaceæ. A form with long, smooth, somewhat coriaceous leaves like those of common Cherry-Laurel.

Cereus Pringlei, Wats. (*G. and F.* 1889, v. 2, p. 364, fig. 92; *H. G.* 1889, p. 253.) Cactaceæ. A gigantic Cactus, with many angled stems, attaining a height of 30 ft. Flowers small, white tinged with purple. Mexico.

Chamærops humilis, var. **dactylocarpa,** Becc. (*B. T. O.* 1889, p. 80, t. 3; *H. G.* 1889, p. 377.) Palmæ. H. H. A variety with elongated fr.

Citrus Daidai. (*H. G.* 1889, p. 419.) Rutaceæ. S. shr. A variety of the Mandarin Orange.

Clavija cauliflora, Rgl. (*Rgl. Descr.*, p. 11.) Myrsineæ. S. tree. This is *Theophrasta antioquensis,* Linden, referred to its proper genus. Antioquia.

Clematis Colensoi, Hook f. (*W. G.* 1889, p. 80.) Ranunculaceæ. H. H. per. similar to *C. indivisa,* with large yellow fl. New Zealand.

Clematis Douglasii, Hook. (*W. G.* 1889, p. 80.) H. per. A dwarf species, with large, blue, bell-shaped fl. N. America.

Clematis intricata, Bunge. (*W. G.* 1889, p. 81.) No description given. Said to have been distributed from the St. Petersburg Botanic Garden. Mongolia.

***Clematis verticillaris,** DC. (*W. G.* 1889, p. 80.) Something in the way of *C. Pitcheri,* with bluish-purple fl. N. America.

***Clerodendron paniculatum,** Lin. (*Gard.* 1889, v. 36, p. 286.) Verbenaceæ. A stove shrub, with 4-angled stems, cordate l., and terminal loose heads of bright crimson fl. Old World Tropics. (Kew.)

***Clianthus Dampieri,** A. Cunn. var. **germanicus,** Schultz. (*H. G.* 1889, p. 481.) Leguminosæ. Garden variety; no description given.

***Clintonia andrewsiana,** Torr. (*B.M.* t. 7092.) Liliaceæ. H. A useful plant for shady positions. Stem 1–1½ ft. high, l. oblong-acute, 6–8 in. long, 3–4 in. broad, fl. numerous in a terminal umbel, with smaller bunches lower down, claret-purple, ½ in. long. N. America. (Kew and Edinburgh Bot. Gard.)

Cocos Datil, Gris. and Dr. (*B. T. O.* 1889, p. 211.) Palmæ. S. Palm, growing to 30 ft. high, with l. 10–13 ft. long. Argentine.

***Cocos eriospatha,** Mart. (*B. T. O.* 1889, p. 211.) S. The corrected name for *C. Blumenavi,* Hagge and Schm. South Brazil.

Cocos petræa, Mart. (*B. T. O.* 1889, p. 211.) S. An elegant dwarf Palm, about 3 or 4 ft. high, with l. not more than about 2½ ft. long. Andes of Bolivia.

Convallaria majalis, L. var. **prolificans,** Wittm. (*Gfl.* 1889, p. 97, t. 1292.) Liliaceæ. H. A form with abnormal fl., the perianth being more or less deeply divided and the lobes more or less spreading. Garden variety. (Hillebrand & Bredemeier.)

Cordia Gregii, Torr., var. **Palmeri,** Wats. (*G. and F.* 1889, v. 2, p. 233, fig. 106.) Boragineæ. G. A showy flowering shrub 5 ft. to 10 ft. high, with small pubescent, toothed l., and terminal clusters of white fragrant fl., in size and form like those of *C. Sebestena*, Vell. N. Mexico.

Cornus florida flore rubro, Hort. (*R. H.*, 1889, p. 154.) Cornaceæ. H. shr. A variety having the fl. tinted with bright red. North America. (Parsons & Sons, New York).

Cornus sanguinea foliis aureomarginatis grandifolia, Hort. (*R. H. B.* 1889, 269.) A sport, remarkable on account of its very large golden-variegated leaves.

***Crinum Schimperi,** Vatke. (*Gfl.* 1889, p. 561, t. 1309.) Amaryllideæ. S. bulb, with an elongated neck, and 6–7 strap-shaped, glaucous l., slightly scabrous on the margin. Umbel about 4-flowered, fl. sessile, white, the tube rather abruptly curved just below the funnel-shaped limb; stamens white. (Berlin Bot. Gard.)

Crocus Karduchorum, Kotschy. (*Gard.* 1889, xxxvi., p. 426.) Irideæ. Corm of delicate membranous fibres, the cap produced into a bunch of sharp points. Sheathing l. equal to proper spathe, proper l. 1–2 in. long, $\frac{1}{20}$ in. broad, those of the previous year persistent to autumnal flw. time. Proper spathe monophyllous, 1 in. high. Perianth tube long, throat unbearded, uniform in colour, with vinous-lilac segments, which are 1–1$\frac{1}{4}$ in. long. Anthers, cream coloured, twice the length of the filaments. Style dividing near the summit of the anthers, spreading, cream coloured. September and October. Kurdistan, Armenia. (Max Leichtlin.)

Crocus Mouradi, Whittall. (*Gard.* 1889, xxxv. p. 473.) Irideæ. Corm oblate 1 in. broad, $\frac{3}{8}$ in. high. Sheathing l. 4, the highest 5 in. above the corm; proper l. 7–8, $\frac{1}{8}$ in. broad. Fl. bright orange, style pale orange, anthers pale yellow. A very vigorous grower, intermediate between *C. chrysanthus* and *C. aureus*. Mourad-dagh, Smyrna. (E. Whittall.)

Croton alabamensis, E. A. Smith. (*G. and F.* 1889, v. 2, p. 592). Euphorbiaceæ. H. A woody shrub 6 to 10 ft. high, with whitish bark, oblong lanceolate scaly leaves, and racemes of small whitish flowers. Alabama. (Harvard.)

Crysophila nana, Bl. (*B. T. O.* 1889, p. 337.) Palmæ. S. Palm of dwarf habit, with roundish flabelliform l. Mexico.

Cucurbita mexicana, Hort. (*W. G.* 1889, p. 460.) Cucurbitaceæ. H. H. trailer of vigorous growth, no further description given. Mexico. (Dammann & Co.)

Cymbidium albucæflorum, F. M. *See* **C. madidum,** Ldl.

Cymbidium eburneo - lowianum, Hort. (*G. C.* 1889, v. 5, p. 363.) Orchideæ. A garden hybrid with the habit of *C. eburneum*. Fl. fragrant, pale yellow or buff, with a crimson blotch on the labellum. (Veitch & Sons.)

***Cymbidium madidum,** Lindl. (*G. C.* 1889, v. 6, p. 406; *O.* 1889, p. 329.) The corrected name for *C. albucæflorum*, F. Muell.

Cymbidium Mastersii, Griff. var. **album,** Rchb. f. (*R.*, vol. 2, p. 39, t. 66.) A form with pure white fl. except the keels, which are yellow. Assam. (E. Wallaert van der Reste, Brussels.)

Cypripedium Aphrodite, Veitch. (*Veitch Man. Cyp.* p. 76) Orchideæ. A garden hybrid between *C. niveum* and *C. lawrenceanum.*

Cypripedium Argus, Rchb. f. var. **Moensii,** Veitch. (*Veitch Man. Cyp.*, p. 11). This is *C. moensianum*, Lind. referred as a var. of *C. Argus.*

Cypripedium Ashburtoniæ, Rchb. var. **majus,** Veitch. (*Veitch Man. Cyp.* p. 79.) A garden hybrid between *C. barbatum* var. *Crossii* and *C. insigne.*

Cypripedium Ashburtoniæ, var. **superbum,** Williams. (*Williams' Cat.*, p. 23.) Garden hybrid between *C. barbatum* var. *superbum* and *C. insigne.*

Cypripedium Beatrice, N. E. Br. (*G. C.* 1889, v. 6, p. 266.) A hybrid raised by Mr. D. O. Drewett from *C. Boxallii* and *C. Lowii.*

Cypripedium buchanianum, Hort. (*Garden*, 1889, v. 35, p. 8.) Raised in the gardens of Mr. Buchan, Southampton, from *C. Druryi* and *C. spiceri-anum.*

Cypripedium Cassiope, Rolfe. (*G. C.* 1889, v. 5, p. 200.) Raised by Messrs. Seeger and Tropp, Dulwich, from *C. venustum* and *C. Hookeræ.*

Cypripedium claptoniense, Rchb. f. (*G. C.* 1889, v. 5, p. 168.) Raised by Messrs. Hugh Low & Co. from *C. harrisianum* and *C. villosum.*

Cypripedium crossianum, var. **psittacinum,** Rchb. f. (*G. C.* 1889, v. 5, p. 9.) Raised by Messrs. F. Sander & Co. from *C. insigne Maulei* and *C. venustum spectabile.*

Cypripedium crossianum, var. **tautzianum,** Rchb. f. (*G. C.* 1889, v. 5, p. 43.) Stove. (F. Tautz.)

Cypripedium De Witt Smith, Rolfe. (*G. C.* 1889, v. 6, p. 6.) A garden hybrid raised by Low & Co., Clapton, from *C. spicerianum* and *C. Lowii.*

Cypripedium Euryale, Veitch. (*Veitch Man. Cyp.*, p. 83.) A garden hybrid between *C. lawrenceanum* and *C. superbiens.*

Cypripedium Figaro, O'Brien. (*G. C.* 1889, v. 6, p. 750.) Raised by Messrs. Seeger and Tropp, Dulwich, from *C. spicerianum* and *C. ænanthum-superbum.*

Cypripedium Godefroyæ, var **Mariæ,** Kerch. (*R. H. B.* 1889, p. 97, with pl.; *H. G.* 1889, p. 317.) A handsome form with very large fl., similar to the var. *bellatulum,* but having the lateral sep. notched at the apex. (Jules Hye-Lysen.)

Cypripedium insigne, var. **halleanum,** Rchb. f. (*G. C.* 1889, v. 5, p. 168.) Differs from all known forms of this species in having the petals covered with numerous dots of chocolate brown. Greenhouse. (W. Hall, Upper Tulse Hill.)

Cypripedium harrisianum, Rchb. f. var. **polychromum,** Linden. (*L.*, v. 4, p. 47, pl. 166.) Garden hybrid. (Dr. Carnus, Louviers.)

Cypripedium insigne, Wall. var. **Sanderæ,** Veitch. (*Veitch Man. Cyp.*, p. 33). A form with primrose-yellow fl., the upper sep. broadly bordered with white and marked with a few brown dots on the central veins. In the pet. and lip the venation is almost obliterated.

Cypripedium longifolium, Rchb. f. var. **gracile,** Veitch. (*Veitch Man. Cyp.*, p. 65.) A small flowered form, with narrow l. and slender scapes.

Cypripedium Minerva, Rolfe. (*G. C.* 1889, v. 6, p. 464.) A hybrid raised by Mr. R. H. Measures, Streatham, from *C. venustum* and *C. harrisianum elegans.*

Cypripedium Niobe, Hort. (*G. C.* 1889, v. 6, p. 701.) Raised by Messrs. Veitch from *C. fairreanum* and *C. spicerianum.*

Cypripedium Orestes, Veitch. (*Veitch Man. Cyp.*, p. 94; *Veitch Cat.* 1889, p. 14.) A garden hybrid between *C. harrisianum* and *C. insigne* var. *Maulei?*

Cypripedium robustius, Rchb. f. (*G. C.* 1889, v. 5, p. 394.) Raised in the garden of Baron N. von Rothschild, Vienna, from *C. Sedeni* and *C. longifolium.*

Cypripedium Sedeni, var. **albanense,** Veitch. (*Veitch Man. Cyp.*, p. 105.) Garden hybrid between *C. Schlimii* and *C. Sedeni?*

Cypripedium T. B. Haywood, Rolfe. (*G. C.* 1889, v. 5, p. 428.) Raised by Messrs. Veitch from *C. superbiens* and *C. Druryi.*

Cypripedium venusto-spicerianum, O'Brien. (*G. C.* 1889, v. 5, p. 394.) A hybrid raised by Mr. D. O. Drewett, Mill-on-Tyne. It has the general appearance of *C. spicerianum.*

Cytisus nigricans, var. **nana,** Hort. (*G. and F.*, 1889; 164.) Leguminosæ. This is a well-known garden plant, **Cytisus capitatus,** Scop.

Damnacanthus indicus, Gærtn. (*Gfl.* 1889, p. 359.) Rubiaceæ. H. or G. evergreen shr., with opposite shining green l. and tubular white fl., succeeded by small scarlet berries; the fl. and fr. being on the plant at the same time in the spring render it very ornamental. Japan. (Berger & Co.)

Davallia fœniculacea, Hook. (*Williams' Cat.* 1889, p. 30.) Filices. An evergreen S. Fern, with a short, thick, decumbent stem, and quadripinnate, finely cut fronds, 1½–2 ft. high, the pinnules cut down to the rachis into narrow, entire, or forked segments.

***Delphinium trolliifolium,** Gray. (*Gard.* 1889, xxxv., p. 523.) Ranunculaceæ. A very distinct and striking species. Stems stout, from 2–4 ft. in height, glabrous or slightly hairy; l. long petioled, 5–7 lobed; the lobes laciniately cleft and toothed, with acuminate segments; raceme loose, few flowered, with longish pedicels; fl. bright blue, 1–1½ in. broad, the spur as long as the sepals. Oregon. (Thompson.)

***Dendrobium bracteosum,** Rchb. f. (*G. C.* 1889, v. 6, p. 493.) Orchideæ. A small plant with compact heads of tiny flowers, the segments rosy, and the lip bright orange. Syn. *D. chrysolabrum,* Rolfe. New Guinea. (Sir T. Lawrence.)

Dendrobium chlorostele - xanthocentrum, Rchb. f. (*G. C.* 1889, v. 5, p. 490.) Raised in the gardens of Sir Trevor Lawrence from the two species indicated by the name.

Dendrobium chrysolabrum, Rolfe. (*G. C.* 1889, v. 5, p. 770.) A synonym of *D. bracteosum,* Rchb. f.

***Dendrobium Fairfaxii,** Rolfe. (*G. C.* 1889, v. 5, p. 798.) A small plant; pseudo-bulbs 3–4 in. long; racemes terminal, 4 in. long; white, green, and purple on the lip. New Hebrides. (Admiral Fairfax.)

***Dendrobium gracilicaule,** F. Muell. (*Bot. Mag.*, t. 7042.) A near ally of *D. kingianum,* differing chiefly in the colour of the flowers, which are yellow with red spots. Australia. (Kew.)

Dendrobium lineale, Rolfe. (*G. C.* 1889, v. 6, p. 381.) Resembles *D. canaliculatum;* pseudo-bulbs 2 ft. high, racemes a foot long, fl. white with purple spots on the lip. New Guinea. (Veitch & Sons.)

Dendrobium transparens, var. **alba,** Rolfe. (*G. C.* 1889, v. 6, p. 95.) A pretty variety, with flowers wholly white. Stove. (Sander & Co.)

Dendrobium wardiano-aureum, Hort. (*G. C.* 1889, v. 5, p. 490.) Raised by Messrs. Veitch, from *D. wardianum* and *D. aureum.*

***Dentaria Killisii,** Brügger. (*G. C.* 1889, v. 6, p. 446.) Cruciferæ. A handsome hybrid between *D. digitata* and *D. polyphylla,* more robust than either of the parents. Alps.

Dentaria pinnato - digitata, Rapin. (*G. C.* 1889, v. 6, p. 446.) An interesting hybrid, intermediate between the two parents. L. pinnate; fl. like those of *D. digitata.* Jura Mountains. (H. Correvon.)

Deutzia gracilis, S. and Z., var. **foliis aureis,** Hort. (*R. H. B.* 1889, 270.) Saxifrageæ. A form with golden leaves.

Diastema Lehmanni, Rgl. (*Rgl. Descr.*, p. 11.) Gesneraceæ. S. per. in the way of *D. picta,* clothed with glandular hairs. L. stalked, ovate, crenate; fl. solitary, axillary, pedicels shorter than the l., corolla with a cylindric tube and spreading ovate lobes, white, spotted, and lined with violet. New Granada. (St. Petersburg Bot. Gard.)

Dicksonia Billardieri, Muell. (*Gfl.* 1889, p. 637, f. 90.) Filices. A synonym of *D. antarctica.*

Diglossophyllum serrulatum, Wendl. (*B. T. O.* 1889, p. 337.) Palmæ. S. This is the Palm known as *Chamærops,* and *Serenoa serrulata.* Texas, Florida.

***Diplarrhena Moræa,** Lab. (*Bull Cat.* 1889, p. 8; *G. and F.*, v. 2, p. 391.) Irideæ. A greenhouse plant allied to *Libertia,* with terminal spikes of white and blue fl. Australia. (Bull.) Cultivated at Kew since 1873.

***Disa tripetaloides,** N. E. Br. (*G. C.* 1889, v. 5, p. 360.) Orchideæ. G. A species like *D. racemosa,* with spikes of from 10 to 30 fl., each about an inch across, white and pink, spotted with crimson. Syn. *Orchis tripetaloides,* Linn. f. South Africa. (J. O'Brien.)

Dodecatheon Lemoinei. (*W. G.* 1889, p. 199.) Primulaceæ. A garden hybrid between *D. integrifolium* and *D. jeffrayanum.*

***Dracæna marmorata,** Baker. (*Bot. Mag.*, t. 7078.) Liliaceæ. S. A large growing plant allied to *D. arborea, D. Hookeri,* &c., but with the leaves bright green, copiously marbled with grey. Singapore. (Kew.)

***Drosera cistiflora,** Linn. (*G. C.* 1889, v. 5, p. 523.) Droseraceæ. G. A large flowered species with the habit and l. of *D. capensis* and cup-shaped fl., 2 in. across, coloured poppy-scarlet. South Africa. (Kew.)

***Echinocactus bolansis,** Runge. (*Gfl.* 1889, p. 106, f. 21.) Cactaceæ. G. succulent, with simple or branched cylindric stems, growing 12–16 in. high; ribs 8–13, spiral, densely covered with interlacing white spines, of which 20–24 are radiating and four are central. Fl. red. Mexico.

***Elæagnus Simoni,** var. **tricolor,** Hort. (*R. H. B.* 1889, 270.) Elæagnaceæ. In this form the margins of the l. are dark green, and the centres variegated with golden and greenish yellow.

Encephalartos regalis, Bull. (*Bull Cat.* 1879, p. 8 and p. 4, with fig.) Cycadeæ. S. A noble decorative plant, with a stout cylindric trunk, crowned with from 12 to 20 pinnate l., 6–7 ft. long, the leaflets being lanceolate, with occasional spines on the upper margin. Doubtfully distinct from *E. Hildebrandti,* A. Br. and Bouché. Zululand.

Enkianthus campanulatus, Hk. f. (*B. M.*, 7059.) Ericaceæ. H. An ornamental deciduous shrub, with short racemes of dark red bell-shaped fl. Syn. *Andromeda campanulata,* Miq. Japan. (Veitch & Sons.)

*Eomecon chionantha, Hance. (*B.M.*, t. 6871; *Gard.* 1889, xxxv., p. 76, with plate.) Papaveraceæ. A fine H. per. intermediate between *Stylophorum* and *Sanguinaria*. L. all radical, 1–2 ft. high, broadly cordiform, with a deep open sinus, margin broadly sinuate, apex rounded. Scape 1–2 ft. high, reddish, erect, subpaniculately branched; fl. 2 in. in diam., white, faintly nerved, stamens numerous, yellow. China. (Kew.)

Epidendrum radiatum, Ldl., var. fuscatum, Rchb. f. (*G. C.* 1889, v. 5, p. 43.) A variety with the fl. wholly purplish. (Sir T. Lawrence.)

*Epiphyllum makoyanum, Hort. (*Gard.* 1889, v. 35, p. 375; *H. G.* 1889, 419; *J. of H.* 1889, p. 362, fig.; *R. H. B.* 1889, p. 229, with pl.) Cactaceæ. S. This is identical with the plant described a few years ago as *E. russellianum*, var. *Gaertneri*. It is evidently a good species, and quite distinct from *E. russellianum*, Gard. Brazil. (Veitch & Sons.)

Eria marginata, Rolfe. (*G. C.* 1889, v. 5, p. 200) Orchideæ. Plant, 6 in. high, with oblong leaves and a hairy raceme bearing two whitish flowers, the lip coloured pale yellow, with a red margin. Stove. Burmah. (J. Bonham Carter.)

Erigeron speciosus, D. C., var. superbus, Hort. (*Gard.* 1889, xxxvi., p. 377.) Compositæ. A fine free flowering variety with much larger blooms than the type. Garden variety.

*Eucalyptus staigeriana, F. Muell. (*G. C.* 1889, v. 5, p. 437, fig. 81.) Myrtaceæ. One of the few species with fragrant foliage. Flowers white. Hardy at La Mortola, where it has been cultivated some years. (T. Hanbury.)

Eucharis Lehmanni, Regel. (*Gfl.* 1889, p. 313, t. 1300, f. 1; *Regel Descr.*, p. 7.) Amaryllideæ. S. bulb, with two elliptic-oblong, l., and an umbel of about four white fl., an inch and a half in diam., corona deeply, 12-toothed. Popayan. (St. Petersburg Bot. Gard.)

Eugenia Garberi, Sargent. (*G. and F.* 1889, v. 2, p. 28, fig. 87.) Myrtaceæ. S. A tree 50 to 60 ft. high, trunk 18 in. in diameter; with ovate oblong leaves and small axillary clusters of white flowers. Florida.

Eulalia gracillima, var. univittata, Carr. and André. (*R. H.* 1889, p. 516.) Gramineæ. H. grass of ornamental character, forming large tufts, and having long, gracefully bent l., banded along their middle with yellow. Japan. (Truffaut.)

Eulophia bella, N. E. Br. (*G. C.* 1889, v. 6, p. 210.) Orchideæ. G. A pretty species, equal in size to *E. streptopetala*. Scape about 2 ft. high, bearing a dozen fl., each 1¼ in. across, and coloured yellow, white, carmine, rose, green, and brown. Zambesi. (J. O'Brien.)

Eulophia callichroma, Rchb. f. (*G. C.* 1889, v. 6, t. 298.) An unattractive plant, introduced by Mr. O'Brien from the Zambesi.

Eupatorium japonicum, Thbg. (*R. H.* 1889, p. 163.) Compositæ. H. herbaceous per. in the way of *E. cannabinum*, with opposite trifoliolate l., pubescent beneath, and corymbs of white fl. Japan, Formosa.

Euphorbia heterophylla, L. (*W. G.* 1889, p. 485, f. 77.) Euphorbiaceæ. H. annual, with pandurate, or variously shaped l., the bracts being of a red colour at their base. North America. (Dammann and Co.)

Fraxinus Regelii, Dippel. (*Nat. Arb. Zosch.* 1889–1890, p. 7.) Oleaceæ. H. Ash-tree of ornamental character; no description given. Central Asia.

*Fritillaria bucharica, Regel. (*B.M.*, t. 7080.) Liliaceæ. An interesting but not very showy species. Bulb globose; stem 1 ft. long; l. numerous, sessile, alternate, lanceolate, 3–4 in. long. Inflor. a lax, many flowered raceme; bracts large, foliaceous, linear, or lanceolate; perianth greenish-white, campanulate, 1 in. long, not tessellated; seg. oblong.; fl. April. Central Asia. (H. J. Elwes.)

Fritillaria hericaulis, Baker. (*G. C.* 1889, vi., p. 38.) Hardy bulb, fl. in April; stem 4–5 inches high, one headed, bearing four erect, alternate sessile l.; lower l. oblong obtuse, upper l. lanceolate, fl. dark purple, not tessellated, obscurely pitted. A near ally of *F. armena*. Chodohadur Dagh, Asia Minor. (Max Leichtlin.)

*Galanthus Fosteri, Baker. (*G. C.* 1889, v., p. 458; *Gard.* 1889, xxxvi., p. 592.) Amaryllideæ. H. bulb, flowering in February; l. bright green, 6 in. long, 1 in. wide. Peduncle slender, shorter than the l. Spathe valve green, linear-convolute, 2 in. long, fl. white, outer seg. oblong spathulate, convex on back, 1–1½ in. long, inner seg. obovate-cuneate. N. C. Asia Minor. (Michael Foster.)

*Galanthus umbricus, Damm. (*Dammann Cat.* 1889, p. 4.) H. A very early flowering form of *G. nivalis*; the large bluish-green l. are produced after

the fl., which resemble those of *G. Imperati*, white, with a greenish-yellow spot on the inner segments. Umbria, Italy.

Genista oweniana, Hort. (*G. C.* 1889, v. 5, p. 342.) Leguminosæ. G. A hybrid raised by Mr. R. Owen, Maidenhead, from *G. everestiana* and *G. elegans*.

Geonoma Herbstii, Hort. (*Gard.* 1889, v. 35, p. 463.) Palmæ. Very similar to *G. gracilis*, but broader in the leaf segments. Stove. (Laing & Sons.)

***Gerbera Jamesoni,** Bolus. (*G. C.* 1889, v. 5, p. 772, fig. 122; *B. M.* t. 7087; *Gard.* 1889, v. 36, p. 340, plate 722.) Compositæ. G. per. A beautiful composite with a tuft of Lactuca-like leaves and erect scapes, bearing large heads of Gazania-like flowers 4 in. across, and coloured rich orange-scarlet. Natal. (Kew.)

***Gladiolus Adlami,** Baker. (*G. C.* 1889, v. 5, p. 233.) Irideæ. H.? A distinct species not unlike *G. cardinalis*, but with much smaller fl., coloured dull yellow, with minute red spots. Transvaal. (Cambridge Bot. Gard.)

***Gladiolus atroviolaceus,** Boiss. (*Dammann Cat.* 1889, p. 4; *W. G.* 1889, p. 411.) H. A distinct and handsome plant, with short, narrow l. striped bluish-green, and 7–12 large fl. with the three upper segments dark purple, almost black, and the lower ones purple or blue, with a white central stripe. Palestine.

Gladiolus Leichtlini, Baker. (*G. C.* 1889, v. 6, p. 154.) H. A fine plant, with the habit and stature of *G. Papilio* and colours of *G. psittacinus*. Transvaal. (Max Leichtlin,)

Gladiolus punctatus, Thunb. (*Dammann Cat.* 1889, p. 4.) G. or H. H. bulb, producing 2–4 light green l., and 2–3 large fl. of a greenish-yellow, inside spotted with purple on the centre of the three upper segments, and outside striped and spotted with brownish-purple.

Gladiolus turicensis, Gumbleton. (*G. C.* 1889, v. 6, p. 183.) H. A hybrid raised by M. Lemoine, of Nancy, from *G. gandavensis* and *G. Saundersii*.

Gladiolus victorialis, Sprenger. (*W. G.* 1889, p. 309.) Garden hybrid between *G. communis* and *G. Colvilli*.

Gossypium Comesii, Sprenger. (*B. T. O.* 1889, p. 308, t. 10.) Malvaceæ. G. shr. A variety of Cotton with 3–5 lobed l., and yellow fl. with a blood-red spot at the base of the pet. Syn. *G. indicum*, Lamk. var. *Comesii*, Sprenger.

***Grammatophyllum measuresianum,** Hort. (*G. and F.* 1889, v. 2, p. 524.) Orchideæ. A provisional name for a plant which is very similar to *G. fenzleanum*, Rchb. f. It has stout fleshy pseudo-bulbs, large leathery green l., and stout erect scapes, 5 ft. or more high, with about 60 large flowers coloured yellow with dark brown blotches. Philippine Islands. (Sander & Co.)

***Gymnocladus chinensis,** Baillon. (*W. G.* 1889, p. 231.) Leguminosæ. H. tree, with large bipinnate l., the pinnæ with numerous oblong obtuse leaflets; the fl. are in short racemes and not showy; the pods are 3–4 in. long, very thick, and contain a soft substance inside, used by the Chinese women for washing the face. Soap Tree. China.

Gymnogramma elegantissima. (*Bull Cat.* 1889, p. 8 and p. 6, with fig.; *H. G.* 1889, 513.) Filices. An elegant S. fern, with bipinnate fronds, the pinules being cut into narrow segments.

Gypsophila raddeana, Rgl. (*Rgl. Descr.*, p. 14.) Caryophylleæ. H. per. of very dwarf cæpitose habit, with small, crowded, ovate-deltoid, subacute l. and solitary pale rosy fl., striped with darker. Eastern Persia. (St. Petersburg Bot. Gard.)

Habenaria macowaniana, N. E. Br. (*G. C.* 1889, v. 5, p. 168.) Orchideæ. A small species, with small unattractive flowers. Syn. *Brachycorythis macowaniana*, Rchb. f. South Africa. (J. O'Brien.)

Helianthus mollis, Lam. var. **cordatus,** S. Wats. (*G. and F.* 1889, p. 136, f. 100.) Compositæ. H. per. of great merit. Stems 3–5 ft. high, leafy, branching; l. broadly ovate, acute; fl. large, orange-yellow, on long leafy peduncles. Western Georgia and Texas.

***Heracleum flavescens.** (*Jard.* 1889, p. 155, with fig.) Umbelliferæ. H. per. A less vigorous species than *H. pubescens* or *H. persicum*, but more ornamental on account of its more abundant and more divided foliage. Austria.

Hibiscus rosa-sinensis, var. **intermedius,** Bull. (*Bull. Cat.* 1889, p. 8 and p. 3, with fig.) Malvaceæ. S. A garden hybrid between *H. rosa-sinensis* var. *magnificus* and *H. schizopetalus*.

Hydrangea aspera, Don? (*Gfl.* 1889, p. 461.) Saxifrageæ. H. shr. resembling *H. paniculata* in habit, with lanceolate, ovate, or almost obovate, l., acuminate at apex, wavy and serrate at

the margin, beneath grey-green, and thickly covered with hairs. Barren fl. large, numerous, white. Pekin. (Forest Acad., Münden.)

Imantophyllum blandfordiæflorum, var. **striatum,** Bull. (*Bull Cat.* 1889, p. 8.) Amaryllideæ. A handsome G. bulb, with the l. striated with creamy-yellow, and dense heads of Blandfordia-like fl., crimson-carmine outside, the segments margined with salmon-buff.

Impatiens Rodigasi, L. Lind. (*Ill. H.* 1889, p. 25, pl. 78.) Geraniaceæ. (Balsamineæ.) S. A pretty Balsam with opposite or whorled, ovate-lanceolate, acute, serrate l., and axillary rosy-purple fl. on long pedicels, having a long slender spur curved forward. Java. (L'Horticulture Internat.)

Iris alata, Poir. vars. **alba, cinerea, cupreata, lilacina, magna, nigrescens,** and **speciosa,** all of Hort. Dammann. (*B. T. O.* 1889, pp. 16–17.) Irideæ. H. A series of colour variations sent out by Dammann & Co.

***Iris atropurpurea,** Baker. (*G. C.* 1889, v., p. 330; *Gfl.* 1889, p. 655.) Handsome Iris belonging to the *Oncocyclus* group; rootstock stout, furnished with fleshy fibres, l. linear glaucous, ½ ft. long. Spathe one-flwd. Perianth tube green, longer than the ovary. Falls oblong-cuneate, 2 in. long, 1½ in. broad; limb purplish-black, with a dense beard of yellow hairs down the claw. Standards orbicular-unguiculate, erect, 3 in. long, 2 in. broad. Syria. (Dammann & Co.)

***Iris bakeriana,** Foster. (*B. M.*, t. 7084; *Gard.* 1889, xxxvi., p. 495–570; *W. G.* 1889, p. 404.) A very beautiful new addition to the *reticulata* group, flowering February and March; l. 3–4 to a bulb, subulate, hollow, with eight distinct ridges in long spirals, glaucous, 6–9 in. long at fl. time, eventually 12 in. long, fl. single, spathe cylindrical, valves unequal, lanceolate, per. tube 3 in. long. Outer seg. with a long obovate-elliptical claw, the blade on upper half and edges, rich dark violet, the lower part marked with violet spots on a creamy ground. Inner segments rather short, pale lilac. Armenia. (Michael Foster.)

Iris Bornmulleri, Hausskn. (*W. G.* 1889, p. 404.) *See* **I. Danfordiæ.**

Iris caucasica, Hoffm. var. **cœrulea,** Regel. (*G. C.* 1889, v., p. 588.) Resembling *I. caucasica* in all but colour of fl.; fl. pale lilac lined with violet, with yellow patch on fall. Caucasus. (Michael Foster.)

Iris caucasica, Hoffm. var. **oculata** Regel. (*G. C.* 1889, v., p. 588.) Similar to type, fl. yellow with blue markings Caucasus. (Michael Foster.)

***Iris Danfordiæ,** Boiss. (*G. C.* 1889, vi., p. 279.) A handsome early spring flowering species, a near ally of *I. juncea.* Bulb ovoid, half as broad as long. Proper leaves all radical, narrow linear glabrous, produced after flowering. Scape 3–4 inches high, 1-flowd.; fl. orange-yellow; falls spotted brown, and obscurely bearded, standards reduced to fine threads. Cicilian Taurus. (Max Leichtlin.) Syn. *Xiphium Danfordiæ,* Baker. *Iris Bornmulleri,* Haussk. Flora 1889, p. 140.

***Iris Gatesii,** Foster. (*Gard.* 1889, xxxv., p. 523; Journ. Roy. Hort. Soc., vol. 11, p. 144.) A magnificent new Iris of the *Oncocyclus* group. In the way of *I. susiana,* but more robust, and with larger fl. Fl. variable in colour, silvery-yellowish, netted with small distinct lines, and minute spots of purple grey. Armenia. (Max Leichtlin.)

Iris juncea, Desf. var. **numidica,** Sprenger. (*W. G.* 1889, p. 443.) H. H. A handsome variety with light yellow fl., having the falls veined with black, and in general effect unlike any other Iris. Atlas Mountains. (Dammann & Co.)

Iris lusitanica, Ker. var. **Viviani,** Sprenger. (*W. G.* 1889, p. 356.) A handsome variety, with large yellow fl. of a wax-like consistence. The falls are sulphur yellow with transparent veins and marked with a large golden blotch. Syn. *I. Viviani,* Sprenger. Portugal.

***Iris Meda,** Stapf. (*B. M.*, t. 7040.) A well marked, not particularly showy species. Rhizome short creeping; l. linear, glaucescent, 3–4 in. long; stem as long as leaves, one-headed; spathe one-flowd., valves lanceolate; perianth tube cylindrical, 1 in. long; seg. of the limb greenish yellow, veined from top to bottom with brown; outer seg. oblong-cuneate, reflexed; brown in the centre, with a dense yellow beard; inner seg. as long as outer narrow, erect. Persia. (Michael Foster.)

***Iris stylosa,** Desf. var. **grandiflora,** Hort. (*G. C.* 1889, vi., p. 666.) Habit of type, but with very large deep purple flowers.

***Jankæa Heldreichii,** Boiss. *G. C.* 1889, vi., p. 415.) Gesneraceæ. H. per. Allied to *Ramondia* and *Haberlea;* l. covered with a fine white tomentum; fl. cup-shaped, deep violet. Olympus, Thessaly. (Max Leichtlin.)

*Kniphofia aloides, Mœnch. var. glaucescens, Hort. (*Gard.* 1889, xxxvi., p. 458, with plate.) Liliaceæ. A garden variety with very large heads of fl.

*Kniphofia natalensis, Baker. (*Gard.* 1889, xxxvi., p. 459; *G. C.* 1889, vi., 562.) A rather pretty doubtfully hardy species, l. bright green, 2–3 ft. long, fl. stem 2–3 ft. high, heads rather loose, 6–8 in. long, fl. orange-red, with darker red veins, the lower or older ones yellow slightly tinged red. Natal. (Kew.)

*Kniphofia Northiæ, Baker. (Journal of Bot. 1889, p. 43; *Gard.* 1889, v. 36, p. 459; *G. C.* 1889, vi., p. 562.) L. 30–50 in a regular rosette, glaucous, channelled, on the face, and without any keel; margins finely serrated. Fl. stems stout 4–6 ft. high; heads dense, 1 ft. long, 4–5 in. diam.; fl. pale yellow, upper ones reddish, style slightly exserted. S. Africa. (Kew.)

*Kunzea pomifera, Muell. (*G.C.* 1889, v. 5, p. 201, fig. 36; *W. G.* 1889, p. 156.) Myrtaceæ. G. A little shrub with terminal clusters of fruit like those of *Myrtus regni*, and known as the "Muntries" of the natives of Australia. They are extensively used for jam making.

Lachenalia quadricolor, Jacq. var. præcox, Sprenger. (*Gfl.* 1889, p. 649, t. 1312, f. 1.) Liliaceæ. G. bulb. A form that flowers about Christmas time. (Dammann & Co.)

Lælia anceps, var. amabilis, Rchb. f. (*G. C.* 1889, v. 5, p. 104.) Orchideæ. Fl. white with a yellow lip marked with purple lines and streaks. (Sander & Co.)

Lælia autumnalis, var. alba, Hort. (*G. C.* 1889, v. 6, p. 420.) A pure white flowered variety. (Veitch & Sons.)

Lælia digbyana-Mossiæ, Veitch. (*G. C.* 1889, v. 5, pp. 658, 742, fig. 111; *Gard.* 1889, v. 35, p. 469; *O.* 1889, p. 175, with fig.) A magnificent hybrid raised by Messrs. Veitch from *L. digbyana* and *Cattleya Mossiæ*. In size and colour the fl. resemble the *Cattleya*, but the lip is deeply fringed as in the *Lælia*. It is one of the finest hybrids raised.

Lælia dellensis, Hort. (*G. C.* 1889, v. 5, p. 695.) Raised in the gardens of Baron Schroëder, Egham, from *L. purpurata* crossed with *L. elegans*.

Lælia præstans, var. alba, Hort. (*G. C.* 1889, v. 6, p. 420.) G. Fl. ivory white, with a crimson tipped lip. (Bull.)

Lælia superbiens, var. quesneliana, Warn. and Will. (*W. O. A.*, vol. 8, pl. 383.) A handsome form, with rosy-mauve sep. and pet., and the lip of an intense magenta purple, with yellow crests and disk. Mexico and Guatemala.

Lælia Victoria, Bergm. (*O.* 1889, p. 268.) A hybrid between *L. crispa* and *Cattleya Dominii*.

Lælio-Cattleya Aurora, Rolfe. (*G. C.* 1889, v. 6, p. 380.) Orchideæ. G. Raised from *L. pumila*, var. *dayana*, crossed with *Cattleya Loddigesii*, by Messrs. Veitch. The flowers are exceedingly beautiful.

Lælio-Cattleya Cassiope, Rolfe. (*G. C.* 1889, v. 6, p. 620.) G. A garden hybrid raised by Messrs. Veitch from *Lælia pumila* and *L. exoniensis*.

Lælio-Cattleya elegans, var. Cooksoni, Rolfe. (*G. C.* 1889, v. 6, p. 586.) G. A variety of *Lælia elegans*, Rchb. f. distinguished by its entire, bright crimson-purple lip. (N. C. Cookson.)

Lælio-Cattleya Stella, Rolfe. (*G. C.* 1889, v. 6, p. 322.) G. The result of crossing *L. crispa* with *L. elegans*, var. *Wolstenholmiæ*. It was raised and flowered by Messrs. Veitch.

*Laportea moroides, Wedd. (*Bot. Mag.*, t. 7057.) Urticaceæ. A stinging-nettle with an erect robust stem, ovate-cordate leaves, peltate and purple raspberry-like fruits in pendant bunches. Stove. Greenhouse. (Kew.)

Lasiosiphon anthylloides, Meisn. (*G. C.* 1889, v. 6, p. 446.) Thymelæaceæ. G. shr. with oblong l., and heads of soft yellow flowers. Allied to *Gnidia*. Cape. (Cambridge Bot. Gard.)

Latace Volkmanni, Philippi. (*Gfl.* 1889, p. 369, t. 1302, f. 1.) Liliaceæ. G. bulb with about two narrow l., and an umbel of small white fl., tubular in the lower half; stamens three, with three sterile filaments alternating with them. Andes of Santa Rosa. Perhaps not in cultivation.

Lilium auratum, vars. macranthum, pictum, and rubrovittatum. (*Gfl.* 1889, pp. 463 and 496.) Liliaceæ. H. bulbs. A series of varieties differing in habit and colour. (T. S. Ware.)

Lilium Bolanderi, Wats. (*Gfl.* 1889, p. 384.) H. bulb with a purplish stem, and ovate bluish-green l. Fl. bell-shaped, with lanceolate segments of a purple-red colour, dotted with blood red inside. California. (T. S. Ware.)

Lilium elegans, vars. **Batemanniæ,** and **Wallacei,** Hort. (*Gfl.* 1889,p. 497.) H. bulbs. The var. **Batemanniæ** is a tall form with 3–12 dark yellow fl. The var. **Wallacei** is a dwarf form, usually one-flowered, spotted with brown, and having stoloniferous bulbs. Japan.

Lilium Martagon, var. **album,** Hort. (*G. C.* 1889, v. 5, p. 809.) H. A white flowered form of the well known Turk's-cap Lily. (Ware & Son.)

Lilium Martagon, L. var. **atrosanguineum,** Dammann. (*B. T. O.* 1889, p. 40, t. 2.) H. bulb. A form with dark purple fl. Europe. (Damman & Co.)

Linaria multipunctata, var. **erecta,** Hort. (*R. H.* 1889, p. 328.) Scrophulariaceæ. Garden variety.

Lilium pardalinum, var. **luteum,** Hort. (*G. C.* 1889, v. 6, p. 52.) H. A variety with the fl. coloured Indian yellow, spotted with brown. Hardy. (Ware & Son.)

Lilium pardalinum, var. **pumilum,** Ware. (*Gfl.* 1889, p. 410.) A garden hybrid between *L. pardalinum* and *L. parvum.* (T. S. Ware.)

***Lilium Wallichianum,** var. **superbum,** Low. (*Gfl.* 1889, p. 554; *G. C.* 1889, v. 5, 809.) A handsome Lily, with linear or lanceolate l., bulbiliferous in their axils, and large funnel-shaped fl. of a light yellow, shaded with purple-rose at the apex of the segments. Himalayas. (Low & Co.)

Liparis fulgens, Rolfe. (*G. C.* 1889, v. 6, p. 620.) Orchideæ. A pretty little plant with bright red flowers. It was introduced by Messrs. Horsman & Co., Colchester, and is supposed to have come from the Philippine Islands. Stove.

Lobelia Kerneri. (*Gfl.* 1889, p. 302; *H. G.* 1889, p. 365.) Campanulaceæ. G. per., with broad lanceolate toothed l. in a rosette, and similar l. along the stem, the upper part of which is covered with violet-purple fl. Costa Rica. (Max Leichtlin.)

Lonicera bella, Zabel. (*Gfl.* 1889, p. 525.) Caprifoliaceæ. Garden hybrid between *L. Morrowi* and *L. tatarica.* (Forest Acad., Münden.)

Lonicera floribunda, Boiss & Buhse. (*Gfl.* 1889, p. 525.) H. shr., with small grey-green ovate l. Fl. very numerous, lateral on short twigs, pale rose-coloured, about ⅔ in. long. N. Persia and Turkestan. (Forest Acad., Münden.)

Lonicera gibbiflora, Dippel. (*Nat. Arb. Zösch.* 1889–1890, p. 8.) H. shr. No description. Amur.

***Lonicera gigantea,** Hort. (*R. H. B.* 1889, 271.) L. glaucous, nearly blue; fl. golden yellow. (Raised by Monsieur Oudin de Lisieux.)

Lonicera micrantha, Trantv. (*Gfl.* 1889, p. 524.) H. A tall bush, with lanceolate-ovate to obovate l., nearly glabrous or slightly hairy. Fl. small pale pink, becoming yellowish after flowering. Berries small, red. Syn. *L. tatarica* var. *micrantha.* (Forest Acad., Münden.)

Lonicera minutiflora, Zabel. (*Gfl.* 1889, p. 523.) Garden hybrid between *L. macrantha* and *L. Morrowi.* (Forest Acad., Münden.)

Lonicera misera, Zabel. (*Gfl.* 1889, p. 523.) Garden hybrid between *L. micrantha* and *L. Xylosteum.* (Forest Acad., Münden.)

Lonicera notha, Zabel. (*Gfl.* 1889, p. 525) and vars. **alba, carneorosea, gilva, grandiflora,** and **ochroleuca,** Zabel. Garden hybrids between *L. ruprechtiana* and *L. tatarica.* (Forest Acad., Münden.)

Lonicera permixta, Zabel. (*Gfl.* 1889, p. 523.) Garden hybrid between *L. micrantha* and *L. tatarica.* (Forest Acad., Münden.)

Lonicera propinqua, Zabel. (*Gfl.* 1889, p. 580.) A garden hybrid between *L. alpigena* and *L. Ledebourii.* (Forest Acad., Münden.)

***Lonicera quinquelocularis,** Hardw. (*Gfl.* 1889, p. 492.) H. shr., with elliptic or ovate l., pubescent beneath, ciliate on the margin; pedicles very short, or almost none; fl. of moderate size, yellowish; berries white. Himalaya. (Forest Acad., Münden.)

Lonicera salicifolia, G. Dieck. (*Gfl.* 1889, p. 524.) Garden hybrid between *L. micrantha* and *L. ruprechtiana.* (Forest Acad., Münden.)

Lonicera segreziensis, Dippel. (*Nat. Arb. Zösch.* 1889–1890, p. 8.) H. shr. The above name is given to a plant that has been cultivated in many places under the false name of *L. hispida.*

Lonicera segreziensis, Lavallée. (*Gfl.* 1889, p. 493.) The corrected name for *L. diversifolia* of gardens. (Forest Acad., Münden.)

Lonicera splendens, Hort. (*G. and F.* 1889, 6, 268.) One of the numerous forms of **L. tatarica.**

Lonicera translucens, Zabel. (*Gfl.* 1889, p. 493.) H. shr., with ovate acute l., rounded or slightly cordate at the base; the fl. are like those of *L. quinquelocularis*, but slightly larger and of a darker yellow colour. Himalaya. (Forest Acad., Münden.)

Lourya campanulata, Baill. (*R. H.* 1889, p. 128, f. 32.) Liliaceæ. S. per., very similar to *Aspidistra* in foliage and habit. Fl. in dense heads at the base of the l. close to the ground, campanulate, yellowish-white, with a black disk-like mark at the base, inside. Cochinchina. (Jardin des Plantes, Paris.)

Lycaste jamesiana, Hort. (*Gard.* 1889, v. 35, p. 502.) Orchideæ. A variety of *L. Skinneri* with white flowers, save the base of the petals and inside the column, which are rich magenta. (Measures, Streatham.)

Lycoris Terracianii, Damm. (*Dammann Cat.* 1889, p. 4.) Amaryllideæ. H. bulb, stated to be a variety of *L. radiata*, with very large crimson fl., which are edged with white when fading. Syn. *L. radiata* var. *variegata*, Baker.

Manihot carthaginensis, Müll. (*W. G.* p. 454.) Euphorbiaceæ. H. H. or G. tree of slender habit, with large palmate l. of a fresh green colour; very ornamental.

Mammillaria Grusoni, Runge. (*Gfl.* 1889, p. 105, f. 20.) Cactaceæ. G. succulent, with globose stem; the tubercles are four-sided and naked in their axils, bearing 14 radiate spines and two central spines, reddish when young, becoming white with age; fl. yellow. Mexico.

Masdevallia caudata - Estradæ, Rolfe. (*G. C.* 1889, v. 5, p. 714; *Veitch, Man. Masdev.*, p. 74.) G. Raised by Messrs. Veitch from the two species indicated by the name.

Masdevallia chelsoni, var. **splendens,** Rolfe. (*Veitch, Man. Masdev.*, p. 74; *G. C.* 1889, v. 5, p. 619.) G. *M. chelsoni* was raised from *M. amabilis* and *M. veitchiana*, the latter being the pollen parent. The form **splendens** is the result of the same cross, but with *M. amabilis* as the pollen parent. (Veitch & Sons.)

Masdevallia Chimæra, Rchb. f. var. **gorgona,** Veitch. (*Veitch, Man. Masdev.*, p. 31.) A variety with the ground colour of the fl. canary-yellow, densely spotted with red-purple, and the lip tinged with pale orange-red. Syn. *M. gorgona*, Hort.

Masdevallia coccinea, Lind. var. **conchiflora,** Veitch. (*Veitch, Man. Masdev.*, p. 34.) Orchideæ. A form with larger fl., having the lateral sep. broader, rounder, and concave. Syn. *M. harryana* var. *conchiflora*, Hort. Bull.

Masdevallia courtauldiana, Rchb. f. (*G. C.* 1889, v. 5, p. 200; *Veitch, Man. Masdev.*, p. 74.) A G. hybrid. Raised by Mr. Norman Cookson from *M. rosea* and *M. Shuttleworthii* (*caudata*).

Masdevallia ellisiana, Rolfe. (*G. C.* 1889, v. 6, p. 154; *Veitch, Man. Masdev.*, p. 75.) G. A hybrid raised by Messrs. Veitch from *M. harryana* and *M. ignea*.

Masdevallia maculata, Kl. var. flava, Veitch. (*Veitch, Man. Masdev.*, p. 52.) A small flowered form, with the tails of an uniform tawny yellow.

Massonia amygdalina, Baker. (*G. C.* 1889, v. 6, p. 715.) Amaryllideæ. G. A small flowered terrestrial plant. Leaves ovate; flowers in a dense head, white, almond scented. Cape. (Sir Charles Strickland.)

Maxillaria crocea, Ldl. var. **Lietzei,** Rgl. (*Rgl. Descr.*, p. 10.) Orchideæ. A variety having the scapes shorter than the l., and the lip oblong, obsoletely three-lobed, the middle lobe entire, disk papillose-pubescent, yellow, with the margin and outside purple-brown. Brazil. (St. Petersburg Bot. Gard.)

Miltonia Bleui, God. Leb. (*O.* 1889, pp. 45 and 121, and p. 145, with pl. as *Miltoniopsis Bleui*, Bleu, vars *aurea* and *splendens*, Bleu; *L.*, v. 4, p. 67, pl. 176.) Orchideæ. Garden hybrid between *M. vexillaria* and *M. Roezlii*. Syn. *M. Bleuana*, Linden; and *Odontoglossum Bleui*, God. Leb. (Bleu.)

Miltonia schrœderiana, O'Brien. (*G. C.* 1889, v. 6, p. 210.) This is *Odontoglossum schrœderianum*, Rchb. f. of 1887 (not of 1882), now referred to *Miltonia*.

Miltonia vexillaria, var. **Leopoldii,** Hort. (*G. C.* 1889, v. 6, p. 334.) Fl. richly coloured, with a very dark triangular blotch at the base of the lip. (Baron Schroëder.)

Miltonia vexillaria, var. **purpurea** Hort. (*G. C.* 1889, v. 5, p. 471.) A variety with very deep-coloured flowers. (F. Tautz.)

Miltoniopsis Bleui, Bleu. (*O.* 1889, p. 145, with pl., and *see* pp. 63 and 179.) *See* **Miltonia Bleui.**

*Mucuna sempervirens. (*G. and F.* 1889, 266.) Leguminosæ. Introduced to England in 1816, but lost to cultivation soon afterwards. Has been reintroduced from China by Kew.

Mulgedium giganteum, Hort. (*W. G.* 1889, p. 225.) Compositæ. H. per. of imposing appearance, 6–8 ft. high, with panicles of blue-violet fl.

*Musa japonica, Hort. (*R. H.* 1889, p. 491.) Scitamineæ. H. H. per. of vigorous habit, something in the way of *M. sinensis.*

*Muscari maweanum, Baker. (*G. C.* 1889, v., p. 648.) Liliaceæ. H. bulb of merit; l. spreading linear, 6–8 in. long, ⅓ in. wide, slightly glaucous, and deeply channelled down the face; peduncles 3–4 in. high; racemes dense, 2 in. long, 1 in. in diam.; fl. bright light blue, oblong, slightly constricted at throat; seg. round, white. Armenia. (G. Maw.)

Muscari tenuiflorum, Hort. Belv. (*W. G.* 1889, p. 443.) H. H. bulb, allied to *M. comosum*, with subulate, channelled l., and a spike of two kinds of fl., the lower ones pendulous, pear-shaped, and olive-green; the upper ones on longer stalks, nearly cylindrical, and of a deep violet-blue.

*Myosotis Reichsteineri. (*W. G.* 1889, p. 290; *Gard.* 1889, v., 35, p. 420.) Boragineæ. A dwarf variety of *M. cæspitosa*, about 2 in. high. (Smith, Newry.)

Narcissus juncifolio-muticus, Baker. (*G. C.* 1889, vi., p. 161, f. 22; *R. H.* 1889, p. 517.) Amaryllideæ. H. A very interesting natural hybrid resembling the well-known *N. odorus*, varying with 1–4 lemon-yellow flws. Gavarnie, Pyrenees. (C. Wolley Dod.)

*Narthex Pollaki, Stapf. (*W. G.* 1889, p. 411.) Umbelliferæ. This is a synonym of *Dorema Ammoniacum.*

*Neillia Torreyi, Wats. (*G. and F.* 1889, v. 2, p. 4, fig. 84.) H. per. Similar to *N. opulifolia*, but more compact in habit, and only two or three feet in height. Rocky Mountains. (Arnold Arbor.)

Nepenthes Burkeii, Mast. (*G. C.* 1889, v. 6, p. 493, fig. 69.) S. A handsome plant, remarkable for its cylindric wingless pitchers, narrowed in the middle, and coloured green with blotches of red. Borneo. (Veitch & Sons.)

Nephrodium pallidum, var. cristatum, Williams. (*Williams' Cat.*, p. 23.) Filices. S. fern; a variety with crested fronds, said to yield a delicious perfume.

*Nerine angustifolia, W. Watson. (*G. C.* 1889, v. 6, p. 195.) The plant described as *N. flexuosa*, var. *angustifolia*, Baker. Natal, Orange Free State. (Kew.)

Nouelia insignis, Franch. (*R. H.* 1889, p. 229, f. 60.) Compositæ. H. H. or H.? shr. or small tree, with lanceolate l., 3–8 in. long, tomentose beneath; and heads of white fl. (Yunnan, China.)

*Nymphæa albo-pygmœa, Wats. (*G. C.* 1889, v. 6, p. 138.) Nymphæaceæ. G. Raised by Mr. Sturtevant of New Jersey, by crossing the two species indicated in the name. The flowers are intermediate in size and character, the habit of the plant being that of *N. alba.* (Kew.)

Nymphæa marliacea, var. chromatella. (*Jard.* 1889, p. 43, with pl.) This is *N. tuberosa*, var. *flavescens*, Oliv.

Nymphæa mexicana, Zucc. (*W. G.* 1889, p. 413.) H. H. Water-lily, with shining yellow fl. (T. Smith.)

Nymphæa sphærocarpa, var. rosea, Hort. (*Gfl.* 1889, p. 389.) Seems to be another name for *N. alba* var. *rosea.* (Wildpark, near Potsdam.)

Ocymum comosum, Dammann. (*W G.* 1889, p. 485, f. 76.) Labiatæ. H. H. annual in the way of *O. basilicum*, with bright green l. and blackish-purple fl. (Dammann & Co.)

Odontoglossum Alexandræ, var. Wilsonii, Warn. and Will. (*W. O. A.*, vol. 9, pl. 387.) Orchideæ. A variety with rosy-tinted sep. and pet., and a white lip with a yellow disk, all parts being blotched with chestnut-brown. Bogota. (A. Wilson, Sheffield.)

Odontoglossum bleichröderianum, J. and L. Linden. (*L.*, v. 4, p. 69, pl. 177.) A handsome plant in the way of *O. crispum*, with rosy-tinted sep. and pet. spotted with purple, lip lanceolate acute, white, with a large purple blotch in the middle. (L'Horticulture Internat.)

Odontoglossum Bleui, God. Leb. (*O.* 1889, p. 63.) See **Miltonia Bleui.**

Odontoglossum Brandtii, Kranz. and Wittm. (*Gfl.* 1889, p. 378 and p. 537, t. 1308; *G. C.* 1889, v. 6, p. 591.) Something in the way of *O. lindleyanum*, of which it is probably a variety. Sep. and pet. yellow, spotted with brown

on the basal part; lip white, spotted with purple-brown, crests two, horn-like. Columbia. (R. Brandt, Charlottenburg.)

Odontoglossum Cervantesii, Llav. and Lex. var. **lilacinum,** Linden. (*L.*, v. 4, p. 59, pt. 172.) A handsome variety, with rosy-lilac fl. (Van. Imschoot.)

Odontoglossum crispum, var. **ruckerianum superbum,** André. (*R. H.* 1889, p. 60, with pl.) A form with handsome rosy-tinted fl. (A. Peeters, Brussels.)

Odontoglossum grusonianum. (*L.*, v. 4, p. 83.) Stated to be a var. of *O. andersonianum*, with pale yellow fl., having the spots almost black. (L'Horticulture Internat.)

Odontoglossum Hallii, Lindl. var. **Lindeni,** Linden. (*L.*, v. 4, p. 83, pl. 184.) A form with richly coloured fl. (L'Horticulture Internat.)

Odontoglossum Hallii, Lindl. var. **superbum.** (*L.* v. 4, p. 83.) A form with very dark fl. bordered with yellow, and having a white lip.

Odontoglossum harryanum, var. **flavescens,** Rolfe. (*G. C.* 1889, v. 6, p. 38.) A remarkable variety, the flowers being wholly yellow. (Mr. A. Wilson, Sheffield.)

Odontoglossum harryanum, var. **pavonium,** Rchb. f. (*G. C.* 1889, v. 5, p. 428.) A richly marked variety with a delightful perfume. (Backhouse & Sons.)

Odontoglossum hebraicum, var. **aspersum,** Rchb. f. (*R.*, vol. 2, p. 69, t. 79.) Seems scarcely to differ from the ordinary form. (Baron Schroëder.)

***Odontoglossum hunnewellianum,** Rolfe. (*G. C.* 1889, v. 6, p. 67; *G. and F.*, v. 2, p. 489.) A distinct and handsome species allied to *O. schilleri-anum.* The flowers are 2 in. across, yellow, with large brown blotches, the lip creamy-white, spotted with brown, the edges crisped and undulate. Greenhouse. Colombia. (Sander & Co.)

Odontoglossum luteopurpureum, var. **crispatum,** Rchb. f. (*G. C.* 1889, v. 5, p. 232, fig. 41.) A variety with the whole front half of the lip convolute into deep folds. (E. Mundy, Derby.)

Odontoglossum peetersianum. (*L.*, v. 4, p. 83.) No description. (Peeters, Brusells.)

Odontoglossum Pescatorei, Linden var. **Hyeanum,** Hort. (*L.*, v. 4, p. 83.) A handsome, large-flowered form. (J. Hye.)

Odontoglossum Pescatorei, Lind. var. **lindenianum,** Linden. (*L.*, v. 4, p. 71, pl. 178.) A beautiful form, with the sep. striate with rosy, the white pet. dotted with blood-red, and the lip white with yellow crests and purple side lobes.

Odontoglossum Pescatorei, var. **thomsonianum,** Hort. (*G. C.* 1889, v. 6, p. 534.) A richly spotted, deep-coloured form which appeared in the collection of H. M. Pollett.

Odontoglossum Rossii, Lind. var. **mommianum,** Linden. (*L.*, v. 4, p. 73, pl. 179.) A striking variety, with the sep. heavily blotched with blood-red, and the pet. marked along the middle with a series of blotches of the same colour; the lip is veined with rosy. Mexico. (Charlé.)

Odontoglossum vexillarium, Rchb. f. var. **fastuosum,** Hort. (*L.*, v. 4, p. 83.) A variety with fl., having rosy pet. and a white lip. (Van Imschoot.)

Odontoglossum vexillarium, var. **Leopoldi,** Rchb. f. (*Gfl.* 1889, p. 65.) A variety similar to var. **superbum,** but with a differently shaped lip, streaked with purple at the base. (P. Van Geert.)

Odontoglossum warocqueanum, J. and L. Linden. (*L.* v. 4, p. 75, pl. 180.) A handsome form, similar to *O. crispum*, with white fl., sparingly spotted on the centre of the sep. and pet. with purple-brown, and the lip with a large central spot of the same colour. (G. Warocqué.)

Odontoglossum wendlandianum, Rolfe. (*G. C.* 1889, v. 6, p. 7; *G. and F.* 1889, v. 2, p. 490.) G. Supposed to be a natural hybrid between *O. crispum* and *O. cirrhosum.* It has the habit and foliage of *O. crispum* and flowers like those of *O. cirrhosum*, but coloured yellow with brown spots. New Grenada. (Sander & Co.)

***Olearia insignis,** Hook. f. (*Bot. Mag.*, t. 7034.) Compositæ. A low, tabular-headed, robust bush, the stems densely clothed with a white felt; leaves leathery oblong, 4–6 in. long. Peduncles one-flowered, heads an inch across, white. Greenhouse. New Zealand. (Kew.)

Oncidium Forbesii, Hook. var. **maximum,** Linden. (*L.*, v. 4, p. 43, pl. 164.) Orchideæ. A large flowered form.

Oncidium Widgreni, Ldl. (*G. C.* 1889, v. 5, p. 557.) G. Allied to *O. cornigerum*, but with far brighter colours, the flowers being bright yellow with bars of light reddish-brown. Brazil. (Marquis of Londonderry.)

Opuntia lucida. (*W. G.* 1889, p. 146.) Cactaceæ. G. Succulent, 3–4 ft. high, having the branches covered with a network of shining spines, and producing large, rose-like, fragrant, yellow fl.

***Opuntia polyacantha,** Mill. (*B. M.*, t. 7046.) The proper name of the plant cultivated in gardens as *O. missouriensis*, D.C.

***Ornithogalum apertiflorum,** Baker. (*G. C.* 1889, v. 6, p. 38.) Liliaceæ. G. Allied to *O. narbonnense*. Leaves slender, 6 in. long; spike 18 in. long; flowers greenish-white, ¾ in. across. Oriental. (Kew.)

Pachyrhizus thunbergianus, Rich. (*W. G.* 1889, p. 153.) Leguminosæ. H. per. climber, with trifoliate l. and violet fl., marked with a yellow spot on the upper petal. Japan. (Ingegnoli Brothers, Milan.)

***Papaver lævigatum,** Bieb. (*G. C.* 1889, v., p. 20, f. 4; *Gard.* 1889, xxxvi., p. 17.) Papaveraceæ. H. A handsome annual species. Stems much branched, 1–2 ft. high, l. pinnate, fl. 3–4 in. in diam., dark scarlet, with black blotch at base of each petal. Levant, Caucasus, &c. (Haage and Schmidt.)

***Passiflora "Eynsford Gem."** (*G. C.* 1889, v. 5, p. 493, fig. 86.) Passifloraceæ. A beautiful hybrid between *P. cærulea*, white var., and *P. racemosa*. (Cannell & Son.)

***Passiflora Pfordtii,** Hort. (*Gard.* 1889, v. 35, p. 572.) A synonym of *P. alato-cærulea*, Lindl.

Passiflora triloba, Ruiz and Pavon. (*Ill. H.* 1889, p. 53, pl. 83.) A handsome S. climber, with cordate, entire, or three-lobed l.; fl. 3 in. in diam.; sep. and pet. reflexed, violet; coronal threads numerous, violet, banded with white, the outer short, the inner long, linear, erect, forming a sort of cup around the stamens and pistil. Peru. (L'Horticulture Internat.)

***Paulowilhelmia speciosa,** Hochst. (*G. C.* 1889, v. 6, p. 749, fig. 106.) Acanthaceæ. G. A herbaceous shrub allied to *Ruellia*, differing only in having the lobes of the corolla spreading fan-like. The plant attains a height of 2 ft., has cordate, toothed, leaves and terminal panicles of blue flowers. Trop. Africa. (Kew.)

***Pentstemon puniceus,** A. Gray. (*W. G.* 1889, p. 198.) Scrophularineæ. H. H. per. about 2½ ft. high, with smooth, shining l., of a greyish tint, and an abundance of scarlet fl. North Mexico. (Vilmorin & Co.)

Peristeria Rossiana, Rchb. f. (*G. C.* 1889, v. 5, p. 8; *B. T. O.* 1889, p. 138.) Orchideæ. Allied to *P. pendula*, differing only in the lip and column. (H. J. Ross, Italy.)

***Phaius Mannii,** Hort. (*G. C.* 1889, v. 5, p. 714.) Orchideæ. A large flowered, deep-coloured variety of *P. Wallichii*. (Kew.)

Phaius philippinensis, N. E. Br. (*G. C.* 1889, v. 6, p. 239.) Pseudo-bulbs 2 in. long; leaves 12 to 18 in. long, lanceolate and plicate; scape as long as the leaves; flowers 2½ in. in expanse, reddish-orange-brown, lip white. Stove. Philippines. (Veitch & Sons.)

***Phœnix Roëbelenii,** O'Brien. (*G. C.* 1889, v. 6, p. 473, fig. 68.) Palmæ. S. A very elegant dwarf species from Siam. Its stem is about 2 in. in diameter, and the leaves are in a compact head, each one being about a foot long, regularly pinnate, the pinnæ as narrow and green as those of *Cocos weddelliana*. (J. O'Brien, and Sander & Co.)

***Pholidota ventricosa,** Rchb. f. (*G. C.* 1889, v. 5, p. 585.) Orchideæ. An interesting species, with leaves 1½ ft. long, and a flower spike a foot high, bearing white convallaria-like flowers. Java. (Veitch & Sons.)

Picea excelsa, var. **capitata,** Hort. (*R. H.* 1889, p. 393, f. 103.) Coniferæ. "A singular variety of the Spruce, in which the bulk of the plant forms a globular mass, from which project, like pins from a pin-cushion, relatively long branches, each bearing a head-like mass of leaves at the top." Garden variety.

Pilogyyne punctata, Hort. (*W. G.* 1889, p. 459, f. 73.) Cucurbitaceæ. This is the same as **Zehneria scabra.**

Pinus silvestris columnaris compacta, Hort. (*R. H.* 1889, p. 393, f. 102.) A slow growing forma, with dense, flame-like outline like *P. Cembra* in a young state. Garden variety.

Pinus Strobus excelsa zebrina, Hort. (*R. H.* 1889, p. 393, f. 101.) A form of the Weymouth Pine, with leaves marked with narrow, white, transverse bands. Garden variety.

Plantago lanceolata, var. **marginata,** André. (*R. H.* 1889, p. 71.) Plantagineæ. H. per. A form with the l. bordered with white, and marked with glaucous stripes, and having the fl.-stem crowned with a tuft of oblong-lanceolate l., spotted with white. It is an abnormal form, and may be increased by division. It was found in the Depart. of Nièvre by M. Gentil.

*Podophyllum pleianthum, Hance. (*G. C.* 1889, vi. p. 299, f. 44; *R. H.* 1889, p. 516; *W. G.* 1889, p. 489.) Berberideæ. A most remarkable and probably hardy perennial. Petioles 1–2 ft. high, the fruiting ones forked, from the base of which are produced the large bunches of dropping, rich purple flowers, followed by fruit resembling the May Apple, *P. peltatum*, glaucous green, purple when ripe; l. peltate, orbicular, 6–8 lobed; the lobes triangular, acuminate, very shallow, margins dentate. China. (Kew.)

*Polemonium pauciflorum, S. Wats. (*G. C.* 1889, v., p. 772, vi., p. 96, f. 15; *W. G.* 1889, p. 411.) Polemoniaceæ. H. perennial. A distinct and ornamental species, 1–1½ ft. high, branching and leafy, glandular, pubescent, fl. funnel-shaped, ½–2 in. long, yellow, tinged red on outside; l. pinnate, leaflets narrow, lanceolate, acute, 1 in. long. Sierra Madre. Chihuahua, Mexico. (Kew.)

*Polygonum sphærostachyum, Wall. (*B. M.*, t. 6847; *Gard.* 1889, xxxv., p. 548, xxxvi., p. 109, 403.) Polygonaceæ. The finest of all the dwarf Polygonums, very desirable for rockeries, &c. Roots tuberous. Stem solitary, erect, leafy, 4–9 in. high; l. 3–6 in. long, linear or linear-oblong, acute, crisped, glabrous, and glaucous, or pubescent underneath; spike 1–2 in. long, cylindrical; fl. ⅛ in. long, drooping, blood-red, very striking. Himalayas. (Kew and Edinburgh Bot. Gard.)

*Primula denticulata, var. variegata, Hort. (*W. G.* 1889, p. 406.) Primulaceæ. H. A garden variety with white-bordered l.

*Primula petiolaris, Wall. var. nana, Hook, f. (*B. M.*, t. 7079*b*.; *Gard.* 1889, xxxv., p. 253.) H. H. A dwarf variety of an extremely variable type. L. almost sessile, obovate, oblong, or spathulate; scape very short; fl. 1 in. in diam., the corolla lobes obcordate, dentate, lilac-purple, with white and yellow eye. Himalayas. (Michael Foster.)

*Primula Poissoni, Franchet. (*G. C.* 1889, vi., p. 361; *R. H.* 1889, p. 491; *W. G.* 1889, p. 406.) G. or H. H. A fine garden species, nearly allied to *P. prolifera*, Wall. Glabrous, 4–6 in. high; l. narrow oblong, with broad, dilated, clasping base, margins serrate; fl. in whorls, rich purple, ½–¾ in. in diam. Yunnan, China. (Kew.)

*Primula pusilla, Wall. (*B. M.*, t. 7079*a*.) H. H. A pretty dwarf species, nearly allied to *P. sapphirina*. Stem 2–3 in. high; fl. capitate, rich purple-violet, and readily distinguished from its many allies, by the ring of woolly hairs at the mouth of the corolla-tube; l. in dense rosettes, oblanceolate obtuse, pinnatifid-dentate; the teeth are recurved. Himalayas. (Kew.)

Primulina Tabacum, Hance. (*G. C.* 1889, vi., p. 356, fig. 52; *R. H.* 1889, p. 516; *W. G.* 1889, p. 445.) Gesneraceæ. H. per. A pretty Alpine, with the habit and flowers of a Primula, exhaling an odour of tobacco; 4–6 in. high; l. suborbicular, or oblong, obtuse, cordate, margins lobed; fl. in loose corymbs, violet-purple; peduncles and calyces glandular-hairy. Native name Shek-in (Rock Tobacco). China. (Kew.)

*Protea nana, Thunb. (*G.C.* 1889, v. 5, p. 523; *Bot. Mag.*, t. 7095.) Proteaceæ. G. A dwarf, pretty flowered species, with pine-like leaves and nodding cup-shaped crimson flower heads, 2½ in. across. Cape. (Kew.)

Pyrus Malus aurea, Hort. (*R. H. B.* 1889, 272.) Rosaceæ. A form of the Crab-apple with the l. yellow, except a green patch in the centre. (Raised by Späth, Berlin.)

*Remijia pedunculata, Karst. (*Gard.* 1889, v. 35, p. 343, fig.) Rubiaceæ. S. shr. Allied to *Cinchona*, and, like it, of value as a source of quinine. It has the habit of *C. officinalis*. Brazil.

*Restrepia pandurata, Rchb.f. (*Veitch, Man. Masdev.*, p. 13.) Orchideæ. A free flowering species, with stiff, leathery, ovate l. 2½ in. long; fl., several produced in succession; upper sep. whitish, with the veins and tip purple; lower sep. and the pandurate lip whitish, spotted with crimson-purple. Columbia. (Glasnevin.)

Rhazya orientalis, Boiss. *W. G.* 1889, p. 221.) Apocyneæ. H. A. pretty plant, resembling a *Vinca*, but with more erect stems, small shining l., and the fl. with a longer tube; they vary from bright blue to dark violet. Taurus.

Rhipsalis pulvinigera, Lindb. (*Gfl.* 1889, p. 182, f. 33, 34.) Cactaceæ. S. succulent, similar to *R. floccosa*, with dark green terete branches, having the areolæ in regular spirals, and bearing small, rounded, rudimentary leaves or scales, of a reddish-brown; fl. white and yellowish-green. Brazil. (Lindeberg, Stockholm.)

Rhododendron "Her Majesty." (*G. C.* 1889, v. 5, p. 533.) G. shr. Supposed to be the result of crossing *R. Fosterianum* with *R. arboreum*, but it shows no trace of the latter species. (Veitch & Sons.)

Rhododendron indico-javanicum, Hort. (*G. C.* 1889, v. 6, pp. 507, 602.) G. shr. A hybrid raised by Messrs. Veitch from *Azalea indica* and one of the Javanese Rhododendrons.

Robinia Pseudacacia, var. **angustifolia,** Hort. (*R. H.* 1889, p. 420.) Leguminosæ. H. tree. Garden variety.

Rosa canina, L. var., **Hetscholdi,** Zbl. (*Gfl.* 1889, p. 240.) Rosaceæ. Seedling variety with peculiarly cut l. (E. Hetschold, Räcknitz-Dresden.)

***Rosa Engelmanni,** Wats. (*G. and F.* 1889 376, fig. 121.) A species with oblong fruit, like that of *R. alpina*, to which it is nearly allied. Colorado.

Rosa gallica, L. var. **conditorum,** Dieck. (*Nat. Arb. Zösch.* 1889–1890, p. 16.) Rosaceæ. H. shr. A variety from which perfume is obtained in Asia Minor.

Rosa humilis, Marsh, var. **triloba,** Sargent. (*G. and F.* 1889, p. 76, fig. 93.) A curious form of this North American species in which the petals are distinctly trilobed.

Saccia elegans, Naud. (*R. H.* 1889, p. 35; *W.G.* 1889, p. 112.) Convolvulaceæ. S. An ornamental bush of compact habit, growing to 5 or 6 ft. high, with axillary clusters of lilac fl. towards the ends of the branches. Cochabamba. (Thuret, Antibes.)

Saccolabium giganteum, var. **Regnieri,** Thays. (*R. H.* 1889, p. 232.) Orchideæ. A variety with fl. measuring 1⅓ in. in diameter. Cambodia. (Régnier.)

Salix hoyeriana, Dieck. (*Nat. Arb. Zösch.* 1889–1890, p. 17.) Salicineæ. H. tree. A handsome weeping-willow, with broad elliptic l., 4 in. long by 2 in. broad. Cascade Mountains, British Columbia.

***Salix Nicholsoni,** Dieck. and var. **purpurascens,** Dieck. (*Nat. Arb. Zösch.* 1889–1890, p. 18.) H. shr. of ornamental character; no description, except that the variety is said to have purple l. when young, and in general appearance to resemble the purple Peach.

***Sansevieria subspicata,** Baker. *G.C.* 1889, v. 6, p. 436.) Liliaceæ. Allied to *S. thyrsiflora*, but differs in having unspotted leaves and longer sub-spicate flowers. S. Africa. (Kew.)

***Sargentia aricocca,** Wendl. (*B.T.O.* 1889, p. 341.) Palmæ. This is the S. Palm known as *Pseudophœnix Sargenti*, Wendl. Florida.

Sarracenia decora, Hort. (*G. C.* 1889, v. 6, p. 250.) Sarraceniaceæ. A hybrid probably from *S. psittacina* and *S. variolaris*. It has very prettily tesselated pitchers about 9 in. high. (Williams & Son.)

Sarracenia wrigleyana, Veitch. (*Veitch Cat.* 1889, p. 12 and p. 7, with fig.; *Gfl.* 1889, p. 495, f. 75.) Garden hybrid between *S. psittacina* and *S. variolaris*.

***Satyrium membranaceum,** Swartz. (*G. C.* 1889, v. 5, p. 137.) Orchideæ. H. H. terrestrial orchid. A large handsome species, with bright red flowers on scapes a foot or more high. It is distinguished from all others by its toothed, fringed petals. Cape. (J. O'Brien.)

***Saxifraga latepetiolata,** Wilk. (*B M.*, t. 7056.) Saxifrageæ. A remarkable and very useful biennial species. Stems 8–12 in. high, branched, robust, lower l. densely rosulate, upper attenuate, all with broad petioles, blade reniform, deeply three-lobed, the lateral lobes often bifid and then five-lobed, coarsely crenate, glandular-hairy; fl. crowded, ½ in. in diam., white. Spain. (Kew.)

Schomburgkia lipidissima, Rchb. f. (*G. C.* 1889, v. 5, p. 72; *W. G.* 1889, p. 112.) Orchideæ. The plant is similar to *S. tibicinis*. Flower-scape 3½ ft. long; the fl. look like those of *Læliopsis domingensis*. (C. Dorman, Sydenham.)

Scilla Ledieni, Engl. (*Gfl.* 1889, p. 153, t. 1294.) Liliaceæ. S. bulb, with narrow, lanceolate l. of a greyish-green, spotted with purple-brown, and frequently producing bulbs at their apex. Raceme many flowered; fl. small, green, with purplish tube. Congo. (Schütze, Breslau.)

Selenipedium caudatum, Rchb. f. var. **albertianum,** Linden. (*L.* v. 4, p. 63, pl. 174.) Orchideæ. A variety with yellow sep., and the lip yellowish, stained with dark purple in front. (Jules Hye.)

***Sicania odorifera,** Naud. (*W.G.* 1889, p. 112; *R. H.* 1889, p. 35.) Cucurbitaceæ. S. A vigorous growing climber, with monœcious yellow fl., and cylindric fr., something like a large cucumber, having a peculiar odour. Brazil.

Simaruba Tulæ, Urb. (*Gfl.* 1889, p. 257, t. 1298.) Simarubeæ. S. shr. or tree with pinnate l., and corymbs of bright carmine fl. The leaflets are elliptic-oblong and shortly pointed, the petioles and branches of the corymb are purplish tinted, and the fl. are about ⅛ in. in diam. Porto Rico. (Berlin Bot. Gard.)

Sobralia xantholeuca, var. **alba,** Hort. (*G. C.* 1889, v. 6, p. 111.) Orchideæ. A variety with pale primrose-coloured flowers. (Veitch & Sons.)

***Solanum crinitum,** Lam. (*W.G.*1889, p. 362.) Solanaceæ. H. H. per., 6–8 ft. high, the stem, petioles, and infl. densely clothed with flexible yellowish-brown bristles; l. large, elliptic, obtusely sinuate-lobed, tomentose beneath; fl. in large clusters, large and showy, deep blue, with five darker lines. Quito.

Solanum guineense, Lamk. (*W. G.* 1889, p. 82.) S. or H.H. annual of rapid growth, 4–6 ft. high, with angular stems, ovate l., and small violet fl., succeeded by dark, shining, blackish-blue fr. West Africa.

***Solanum pensile,** Sendtn. (*Bot.Mag.*, t. 7062.) A handsome stove climber, with cordate leaves and large pendent racemes of bright blue flowers with conspicuous yellow stamens. Brazil.

Sorbus Aucuparia, var. **atropurpurea,** Carr. (*R. H.* 1889, p. 114.) Rosaceæ. H. tree. A form with large corymbs of fl., and very large fr. of a very dark red.

***Spiræa kamtschatika,** Pall. (*G. C.* 1889, vi., p. 126; *Gard.* 1889, xxxvi., p. 148.) Rosaceæ. H. Herbaceous perennial of stately growth. Stems 4–10 ft. high; l. 6 in. wide, 4 in. long, leaf-stalk channelled, coarsely hairy, provided with two leafy stipules at base, and a number of irregular leaflets along its entire length; terminal leaflet broadly, ovate, cordate, palmately five-lobed, lobes biserrate pointed, inflorescence large, white, fragrant. Kamtschatka. *S. gigantea,* Hort. (Paul & Son, Cheshunt.)

***Stapelia desmetiana,** N. E. Br. (*G.C.* 1889, v. 6, p. 684.) Asclepiadaceæ. A free-growing, large-flowered plant, which has been in cultivation about 16 years, but has never been described before last year.

Stapelia erectiflora, N. E. Br. (*G. C.* 1889, v. 6, p. 650.) A small free-flowering plant with erect pedicels and small Turk's-cap-like flowers. S. Africa.

Streptocarpus Bruanti, Carr. and André. (*R. H.* 1889, pp. 267 and 292.) G. A hybrid between *S. Rhexii* and *R. polyanthos.* (Bruant.)

***Streptocarpus parviflora,** E. Mey. (*Bot. Mag.*, t. 7036.) Gesneraceæ. The true plant of this name, that previously figured in *Bot. Mag.* at t. 6636 as *S. parviflora* being *S. lutea,* Clark. The former has broad, shaggy, sessile leaves and erect many-flowered scapes, the flowers being purplish on the tube, white and yellow on the limb. Greenhouse. S. Africa. (Kew.)

Susum anthelminticum, Bl. (*R. H.* 1889, p. 76, f. 23.) Flagellariaceæ. S. An interesting Dracæna-like plant, with staked, lanceolate acuminate l., and a stout fl.-stem, bearing half-whorls of fl.-spikes 2–3 in. long, of reddish-tinted unisexual fl. Sumatra. (Jard. des Plantes, Paris.)

Swainsonia coronillæfolia, var. **alba,** Hort. (*W. G.* 1889, p. 487.) Leguminosæ. G. shr. A form with white fl. Australia.

Synthyris pinnatifida, Watson. (*W. G.* 1889, p. 222.) Scrophularineæ. H. per. 6–8 in. high., with leathery, bipinnatifid, deep green l., and spikes of handsome dark blue fl. Rocky Mountains. (Backhouse & Son.)

Tachiadenus radiatus. (*W. G.* 1889, p. 113.) Gentianaceæ. This seems to be an error for **T. carinatus.**

***Tecoma Smithii,** Bull. (*Bull Cat.* 1889, p. 8.) Bignoniaceæ. G. climber. A garden hybrid between *T. velutina* and *T. capensis.*

Tetramicra minuta, Rolfe. (*G. C.* 1889, v. 5, p. 527.) Orchideæ. G. A very small species, the whole plant barely 2 in. high. (Veitch & Sons.)

***Tigridia buccifera,** S. Wats. (*G. and F.* 1889, p. 412, fig. 125.) Irideæ. H. H. A very beautiful species. Stems 1 ft. high, glaucous, branching; radical l. 1 ft. plicate; cauline bracts foliaceous, spathes of two unequal bracts 1–2 inches long; fl. 2 inches broad, greenish-yellow, purple-dotted at base, blade of outer seg. purple; inner seg. tubular, folded in centre; the dilated sides approximate in two cheek-like prominences, below the small, concave-rounded, purple blade. Anthers nearly sessile, styles hardly longer. Jalisco Mountains, Mexico.

Tillandsia Geissei, Philippi. (*Gfl.* 1889, p. 369, t. 1302, f. 2; *R. H.* 1889, p. 388.) Bromeliaceæ. A small species, with linear-subulate, channelled, silvery l., and a fl.-stem about 6–8 in. high, ending in a simple few-flowered spike of rosy fl., bracts green at the base, carmine above. Chili.

Tillandsia kirchoffiana, Wittm. (*Gfl.* 1889, p. 107, f. 22.) L. subulate from a bulbous base, recurving, green. Infl. a slender panicle with coral-red bracts and blue fl. Mexico. (C. E. Kirchhoff, Baden.)

Trithrinax campestris, Griseb. & Dr. (*B.T.O.* 1889, p. 337.) Palmæ. H. H. Palm of majestic appearance, allied to *T. braziliensis*, but differing in having the leaflets shortly-bifid, with a white tomentum above and glabrescent beneath, and the branches of the spadix stouter. South Argentine.

***Tulipa Batalini,** Rgl. (*Rgl. Descr.*, p. 4; *Gfl.* 1889, p. 506, t. 1307, f. 2; *G. C.* 1889, v. 6, p. 469.) Liliaceæ. H. bulb, with the scales of the bulb bearded at the apex inside with brown wool. L. linear-lanceolate. Fl. pale yellow. Filaments glabrous. Buchara. (St. Petersburg Bot. Gard.)

***Tulipa Dammanni,** Rgl. (*Rgl. Descr.*, p. 4; *W. G.* 1889, p. 352, f. 61; *Gfl.* 1889, p. 314, t. 1300, f. 2.) H. bulb, in the way of *T. linifolia*, having the bulb-scales villose inside, linear-lanceolate l. ciliolate on the margin, and purple fl., marked with a black blotch at the base of the segments. Filaments glabrous. Mount Libanon. (Dammann & Co.)

Tulipa Leichtlini, Regel. (*Gard.* 1889, xxxv., p. 354.) H. A handsome species nearly allied to *T. stellata*; l. erect or recurved linear-lanceolate, acuminate; scape 1 ft. high; fl. large, outer segments shorter than the inner, rich purple-red, broadly margined with white; inner seg. oblanceolate yellowish-white. Kashmir. (Max Leichtlin).

***Tulipa Maximowiczi,** Rgl. (*Rgl. Descr.*, p. 3; *Gfl.* 1889, p. 505, t. 1307, f. 1; *G. C.* 1889, v. 6, p. 469.) H. bulb allied to *T. linifolia*, but with the bulb-scales hairy within at the apex, the stem leafy, with alternate linear l., with red, minutely ciliolate margins; fl. scarlet-purple, the outer segments marked at their base with a blue-black spot, bordered with white. Buchara. (St. Petersburg Bot. Gard.)

***Tulipa vitellina,** Hort. (*Gard.* 1889, xxxvi., p. 531, with plate.) H. A garden hybrid, probably between forms of *T. suaveolens*, and *T. gesneriana*, 1–2 ft. high; fl. large, delicate yellow, seg. ovate, blunt; l. ovate-lanceolate acute, glaucous.

Utricularia rhyterophylla, Hort. (*W. G.* 1889, p. 74.) Lentibulariaceæ. S. A dwarf compact plant, with violet fl. marked with yellow on the palate. This is *U. longifolia*, Gardn.

Uniola Palmeri, Vasey. (*G. and F.* 1889, p. 400, fig. 124.) Gramineæ. H. per., with rigid cane-like culms 2–4 ft. high, leafy to the top; l. erect, involute, with a long pungent apex; raceme of staminate plants 6–9 in. long, the branches in twos and threes; spikelets small, 7–9 flwd.; raceme of fertile plants more dense, 4–6 in. long, the branches nearly sessile. A fine ornamental species. Colorado River, N. America.

***Vanda kimballiana,** Rchb. f. (*G. C.* 1889, v. 5, p. 233; v. 6, pp. 294, 335, fig. 333; *G. and F.*, v. 2, p. 499.) Orchideæ. A distinct and beautiful species allied to *V. amesiana*. The leaves are subulate, dark green, about 9 in. long, as thick as a raven's quill. The spike is erect, about a foot high, many flowered, each flower 2½ in. across, pure white with a rosy-purple lip. (Low & Co., Clapton.)

Viburnum Lentago, L. var. **subpedunculatum,** Zabel. (*Gfl.* 1889, p. 462.) Caprifoliaceæ. H. shr. A variety with short peduncles, about ⅜ of an inch long. (Forest Acad., Münden.)

Viburnum Vetteri, Zabel. (*Gfl.* 1889, p. 462.) H. shr. A hybrid between *V. Lentago* and *V. nudum*. Garden hybrid. (Forest Acad., Münden.)

Vriesea Alberti, André. (*R. H.* 1889, p. 300, f. 73, and coloured pl.) Bromeliaceæ. A garden hybrid between *V. incurvata* and *V. morreniana*. (Truffaut.)

Vriesea magnisiana, Kittel and Wittm. (*Gfl.* 1889, p. 343, f. 56–58.) A garden hybrid between *V. Barilletii* and *V. fenestralis*. (G. Kittel, Glatz.)

Vriesea Mariæ, André. (*R. H.* 1889, p. 300, f. 74, and coloured pl.) A garden hybrid between *V. Barilleti* and *V. brachystachys*. (Truffaut.)

Vriesea morreno-barilletiana, Duval. (*Ill. H.* 1889, p. 103, pl. 91.) A garden hybrid between *V. Barilleti* and *V. psittacina*, var. *morreniana*.

Vriesea versaliensis, Truff. (*Ill. H.* 1889, p. 73, pl. 87.) A handsome garden hybrid between *V. psittacina* var. *duvaliana* and *V. brachystachys*. (Truffaut.)

***Watsonia iridifolia,** var. **O'Brieni,** N. E. Br. (*G. C.* 1889, v. 6, pp. 334, 350; *R. H.* 1889, p. 541.) Iridaceæ. G. A lovely plant, similar to *W. rosea* in general appearance, but with pure white flowers. S. Africa. (J. O'Brien.)

***Xylobium leontoglossum,** Rolfe. (*G. C.* 1889, v. 5, p. 458; *B. M.*, t. 7085.) Orchideæ. A new name for *Maxillaria leontoglossa*, Rchb. f.

*Xylobium corrugatum, Rolfe. (*G.C.* 1889, v. 5, p. 458.) A new name for *Maxillaria corrugata*, Lindl.

*Yucca elata, Engelm. (*G. and F.* 1889, v. 2, p. 568, fig. 146.) Liliaceæ. An arborescent species with a trunk 3 to 12 ft. high by 10 in. in diameter; leaves linear, filamentose on the margins; flowerscape stout, erect, branching, 7 to 10 ft. high, bearing numerous white fragrant flowers, each 3 to 4 in. in diameter. Mexico.

Zygopetalum Gibeziæ, N. E. Br. (*L.*, v. 4, p. 79, pl. 181.) Orchideæ. Very similar to *Z. cochleare*, with cuneate-oblanceolate, acute l., and solitary fl. The sep. and pet. are oblong-lanceolate acute, white, without markings. Lip large and broad, with the sides turned up, white veined with violet, having a thick crest at the base. (L'Horticulture Internat.)

Zygopetalum lucidum, Rolfe. (*G. C.* 1889, v. 5, p. 799.) Orchideæ. Belongs to the section *Huntleya*, and is like *H. Meleagris*, Ldl., but is smaller and different in colour. Stove. British Guiana. (Sander & Co.)